



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



Contents lists available at ScienceDirect

## Progress in Planning

journal homepage: [www.elsevier.com/locate/progress](http://www.elsevier.com/locate/progress)

## Financing urban development, three business models: Johannesburg, Shanghai and London

Jennifer Robinson<sup>a,\*</sup>, Philip Harrison<sup>b</sup>, Jie Shen<sup>c</sup>, Fulong Wu<sup>d</sup><sup>a</sup> Department of Geography, 26 Bedford Way, London, University College London, WC1H0AP, United Kingdom<sup>b</sup> School of Architecture and Planning, University of the Witwatersrand, Yale Road, Braamfontein, Johannesburg, 2050, South Africa<sup>c</sup> School of Social Development and Public Policy, Fudan University, Shanghai, China<sup>d</sup> Bartlett School of Planning, 14 Upper Woburn Place, University College London, WC1H 0NN, United Kingdom

## ARTICLE INFO

## Keywords:

Mega-urban development  
Comparative urbanism  
Finance  
Land value capture  
Governance

## ABSTRACT

There has been growing interest in the expansion of global investment in urban areas, and the financialisation of urban development, both of which bring new business logics into the production of the built environment and shape urban outcomes. At the same time, mega urban projects have continued and spread as a significant format of urban expansion and renewal, often strongly linked to transnational investors and developers. Nonetheless, the distinctive regulatory and political contexts within which transnational actors must bring such projects to fruition matter greatly to outcomes, with territorialised governance arrangements both shaping and being shaped by transnational dynamics. However, there has been little systematic comparative consideration of these diverse regulatory contexts in their own right, rather than as contributors to wider circulating processes such as neo-liberalisation. As a result, the implications of different regulatory regimes for urban outcomes have not been effectively assessed. In this paper we therefore broaden the discussion from globalised processes of “financialisation” to consider three large-scale urban development projects from the perspective of their distinctive “business models”, including their place in achieving wider strategic objectives at national and metropolitan scales, their agile and often bespoke institutional configurations, and their different forms of financing, taxation and land value capture. Our cases are Lingang, Shanghai (one of nine planned satellite cities), the Corridors of Freedom project in Johannesburg (a linear transport oriented development seeking to integrate the racially divided city), and Old Oak and Park Royal in north-west London (under a mayoral development corporation, associated with significant new metropolitan and national transport investments). We observe that the business models adopted, notably in relation to financial calculations and income streams associated with the developments, are a result of strongly path dependent formats of governance and income generation in each case. However we want to move beyond seeing these as residual, as contingent and contextual to wider accounts of urban development focussed on globalised financial flows and calculations. Using a comparative approach we initiate a systematic analytical conversation about the implications of different business models for the form and socio-economic potential of mega-urban development projects.

## 1. Introduction

This paper considers three large-scale urban development projects from the perspective of their business models. By “business model”<sup>1</sup> we mean the plan for how the development could be made feasible, through

institutional configurations, orchestrating finances, and building political constituencies. Our cases are Lingang, Shanghai (one of nine planned satellite cities), the Corridors of Freedom project in Johannesburg (a linear transport-oriented development seeking to integrate the racially divided city), and Old Oak and Park Royal in north-west London (a new

\* Corresponding author.

E-mail addresses: [Jennifer.Robinson@ucl.ac.uk](mailto:Jennifer.Robinson@ucl.ac.uk) (J. Robinson), [Philip.Harrison@wits.ac.uk](mailto:Philip.Harrison@wits.ac.uk) (P. Harrison), [shenj@fudan.edu.cn](mailto:shenj@fudan.edu.cn) (J. Shen), [fulong.wu@ucl.ac.uk](mailto:fulong.wu@ucl.ac.uk) (F. Wu).

<sup>1</sup> We use here business model as a conventional term in business to describe the plan of operation - policy, asset and governance choices (Ovans, 2015). By using this term we do not mean that the cases are in any way “models” or representative of their contexts, or exemplary ways to do development. As the discussion to follow makes clear, each is in its own way in fact somewhat at odds with their metropolitan and national context,

<https://doi.org/10.1016/j.progress.2020.100513>

Received 13 October 2019; Received in revised form 11 June 2020; Accepted 17 June 2020

Available online 7 October 2020

0305-9006/© 2020 Published by Elsevier Ltd.

residential neighbourhood and commercial centre, associated with significant metropolitan and national transport investments). (See Fig. 1) Most comparative studies of large-scale developments have focussed on similar contexts: Europe and the US (Fainstein, 2008; Moulaert et al., 2003), Asia (Shatkin, 2008; 2017) or Africa (Van Noorloos & Kloosterboer, 2018). But inspired by robust methodological innovations in urban comparativism to support a more global urban studies (McFarlane, 2010; Robinson, 2011, 2016; Robinson and Attuyer, 2020; Ward, 2010), we confidently bring together case studies from three very different contexts – Asia, Africa and Europe. This opens up scope for new analytical and political insights, occluded when “most similar” comparative tactics are used: a wider range of processes, dynamics and agents of urban development can be considered; and the complex territorialised configurations of institutions and financing associated with large-scale urban developments come to the fore analytically – what we are calling business models. A more global perspective is essential if urban studies is to be able to engage with the proliferation of large-scale developments without mistakenly imposing an *a priori* analytical frame, or succumbing to exceptionalism (Croese, 2018; Shatkin, 2017; Van Noorloos & Kloosterboer, 2018; Watson, 2014).

While there has been strong interest in the globalised drivers of urban development, theoretically-driven analyses have tended to be highly EU and US-centric, adopting frameworks which reflect the particular histories of those regions, such as post-Fordism, neoliberalisation, or financialisation (Aalbers, 2016; Orueta and Fainstein, 2008; Swyngedouw, Moulaert, & Rodriguez, 2002). The different political economic trajectories of other parts of the globe – including excoriating structural adjustment policies, extensive industrialisation, developmental neoliberal policies, state-centric development, or divergent political trajectories have seldom been drawn into overarching narratives of global urbanisation (Ferguson, 2010; Robinson & Parnell, 2010; Parnell and Pieterse, 2014; Wu, 2017; but see, Robinson, 2016).

For scholars focussing on cases of large-scale development from across a wider range of contexts, different kinds of circuits and histories come to the fore. This has included: networks of expertise, trust and design (Olds, 2001); major shifts in international urban development policy (Parnell, 2016); diverse political formations (Shatkin, 2016; 2017), the role of local elites in regional and national political networking (Kinossian, 2012), policy and investment agendas driven by a “scramble for infrastructure” (Kanai & Schindler, 2018), innovations in governmental technologies following Asian-centric circuits of inter-referencing (Roy and Ong, 2011); investment circuits shaped by local, national and transnational property developers operating in concert (Halbert & Rouanet, 2014; Halbert, Attuyer, & Sanfelici, 2016).

Overlaying this has been a tendency in studies of large-scale urban developments, and in urban studies more generally, to struggle with how to formulate the relationship between “wider” social and economic processes, and particular urban outcomes and contexts (González et al., 2018; Savini and Aalbers, 2016). Even as both are routinely seen as important, it is “globalising” processes which have formed the basis for thinking across difference, and difference has been framed in relation to these processes, for example as “variegation” (Peck, Theodore and Brenner, 2009). Urban outcomes, including the territorialised institutional configurations of large-scale developments, have seldom been considered on their own terms rather than as compositions made up of, and in turn constituting, variations on wider processes such as neoliberalisation, or financialisation (for example, Fainstein, 2008; Moulaert et al., 2003). Thus, close comparative analysis of the diverse governance arrangements and territorialised institutional architecture for enabling urban development outside of the theoretically saturated focus on certain circuits and histories has been somewhat neglected. Careful attention has certainly been paid to specific developments as evidence of contextual variation of the wider transnational processes shaping urban development (for example, Budenbender & Aalbers,



### Financing urban development, three business models: Johannesburg, Shanghai and London



Fig. 1. Three cases of large-scale development: Johannesburg, Corridors of Freedom; Shanghai, Lingang satellite city; London, Old Oak Park Royal.

2019), explaining the distinctive outcomes in specific cases. Studies have also demonstrated how specific urban developments can themselves become important sites for the transformation of wider globalised processes such as urban governance, or finance (Buckley & Hanieh, 2014; Moulaert et al., 2003). However, the potential to think systematically with the diversity of the outcomes of urban development has been limited by formulations such as “variegation” which tie diversity to the explanatory framework of wider processes (Gonzales et al., 2018; Peck, Theodore, & Brenner, 2009; Robinson & Parnell, 2010; Peck, 2017).

Drawing on a rigorous comparative imagination, we propose the value of a systematic, comparative analysis which starts with the diverse and distinctive territorialised formations of large-scale urban developments in order to re-build understandings of urban development politics to reflect the diversity of urban experiences (Lauermann, 2018). Transcalar co-ordination of actors from government, private sector and many interest groups can mark a distinctive governance formation, territorialised at the scale of the project (Halbert and Rouanet, 2016; Pinson, 2009). With this focus, we bring into view the *urban processes* which are at work in shaping large-scale developments in three different national-political contexts, including the complexities of cross-scalar governance but also, for example, land value, changing land use, competing interests. On this basis, we seek to build towards emergent generalisations, close to the specific experiences we recount (Lancione and McFarlane, 2016), but with potential to be more widely relevant (Schmid et al., 2018). Although all three projects occurred in contexts with some experience of the neoliberalisation of urban policy and governance (Massey, 2007; Murray, 2011; Wu, 2017) and the financialisation of investment (Halbert & Attuyer, 2016; Wu, 2020), resisting applying these weighty analytical perspectives as *a priori* explanations for outcomes has allowed us to focus on the cases in their own right, rather than as different versions of neoliberalisation or financialisation. In this way we hope to enrich the analytical framework for urban politics. Thinking comparatively across the three cases, allowing them to question and speak to one another, expanded our analytical repertoire on each as well as informing the overall analysis. This was especially the case in thinking about the interests and agency of state actors, and the implications of different forms of financing, including taxation (of income, property, or in kind as planning gain), revenue streams from the development activities, and direct land value capture.

We therefore attend closely to the specific institutional mechanisms and sources of financing which have made each of these large-scale urban developments possible: their business models. The business model for a large-scale development is usually bespoke, at times at odds with conventional practices in that context, and, given the long time-scale and complex institutional environment associated with their delivery, often varies significantly over the life-time of the project (Flyvberg, 2014). The business model of each development is strongly shaped by territorialised regulatory formations (Schmid, 2015), including the distribution of political interests and power, specific ways of taxing urban activities, the distinctive forms of land value capture, and the range of financial instruments available to actors. In all three of our cases the opening for development was crafted through the co-ordination of complex and path dependent state strategies across different scales, agencies and actors, reflective of extant institutional forms and particular territorial configurations of political interests. All three projects depend (at least in the long term) on realizing and using the financial returns generated by the development to cover the costs of the development. In all three cases we identify that assembling the support, institutional capacity and finances for a large-scale, cross-jurisdictional and long-term project has required innovations in the institutional architecture and the political room to manoeuvre to build a transcalar constituency in support of the development. All of these establish the basis on which the development is made possible – an effective business model. The business model which was arrived at in each case had major implications for whether the development could

deliver beneficial public goods, such as affordable housing, lessening or compensating for disruptive impacts on existing and nearby residents, or achieving redistributive or long-term economic goals. We are therefore able to identify, in the conclusion, the distinctive features of each case that enabled beneficial outcomes, or to assess failures against policy objectives or public demands. To set the scene for a detailed discussion of the three cases, the following sections consider, firstly, the grounds for comparing the three large-scale urban developments which are located in quite different national and urban contexts; and, secondly, the aspects of large-scale urban developments which our study illuminates.

### 1.1. Thinking with variety: Comparing large-scale developments

We take a comparative approach in this paper in order to yield systematic analysis of the innovations in urban governance which often flow from large-scale developments. We build towards insights across diverse cases based upon the shared features of large-scale urban developments. We operationalise the comparative strategies proposed by Robinson (2011, 2016) and others (Hart (2016); Jacobs, 2012; Leitner & Shephard, 2016; McFarlane, 2010; Peck (2015); Ward, 2010) for extending the scope of urban studies, which has conventionally restricted comparisons to most similar cases and therefore focussed largely on US and European cases (Kantor & Savitch, 2005; Pierre, 2005; Robinson, 2011). Inspired by the potential of a reformatted comparativism to question ethnocentric assumptions (Pickvance, 1986) and to support a more global basis for urban theory (Robinson, 2011), we have developed a comparison which brings together three quite different urban contexts – China, South Africa and the UK. Robinson (2016) identifies two grounds for such comparisons: “genetic” and “generative”. ‘Genetic’ grounds for comparing rest on the prolific interconnections (finances, ideas, people, materials) which tie many urban settings into shared circuits – tracing these can inspire effective comparisons across differentiated outcomes. ‘Generative’ grounds, which concern us here, involve starting with shared features of diverse urban experiences, in our case, with large-scale developments, which are ubiquitous. On this basis, thinking with the variety of processes and outcomes across the cases can be generative of new insights. Conventional comparativists have often highlighted or demonstrated through their comparisons how “thinking with variety” is key to generating insights – unfortunately, this variety has too often been limited to relatively similar cases (Clarke, 1995; Savitch & Kantor, 2004; see Robinson, 2014). Our aim is to contribute to stretching concepts in urban studies, notably in relation to urban development politics which has relied strongly on the US case in bringing forward analyses (Cox, 2016; Lauermann, 2018). On the one hand, then, we operationalise a post-colonial move to stretch beyond the Euro-American heartland and include the case of Johannesburg as a starting point for conceptual analysis. And on the other we include a Chinese case, Shanghai, as another equal starting point for theorising about urban development. Neither exceptions nor recipients of external theories (Parnell and Pieterse, 2014; Wu, 2017, 2020), the cases of Shanghai and Johannesburg have informed our analysis of London. Placed as just another “ordinary city” (Robinson, 2006), studies of London can both learn from insights generated in other contexts – as a destination for theory generated elsewhere – and in turn inspire innovative analysis in the context of comparative reflection.

The grounds for comparing these three cases from quite different contexts rest on the shared features of large-scale developments. These bring forward significant institutional and financial challenges, associated with the cross-jurisdictional and extended time-frame (more than twenty years for these cases) of large-scale urban development projects. In each case, undertaking the planned development has required marshalling diverse existing sources of income as well as securing exceptional financial investment and managing the phasing of development to configure different income streams. It has also required co-ordinating a multiplicity of institutional actors and sustaining



development in the face of changing political, policy and economic conditions. In all three cases, the strategic value of the development to wider political and planning agendas is evident, but so are the challenges of innovation and co-ordination involved in such ambitious new developments. Consequently, and as is characteristic of large-scale, or mega-urban, developments (Flyvberg, 2014; Gualini & Majoor, 2007), none of the three developments has come to fruition as initially expected. However, significant progress has been made in each, and we have been able to document and observe the detailed institutional and financial arrangements associated with initiating and advancing each development.

In this paper we build our comparative analysis across the following three themes which structure each chapter which follows: the wider national and metropolitan context in which the project is conceived and how the development is contributing to strategic urban development plans in that context; how the development has been enabled through innovations in existing or establishing new institutions; and the specific business model associated with the project – how it is financed and what returns are anticipated from the development, who these will flow to, and how they are being used to cover the costs of development. In each case, achieving the development, or at least establishing the potential for the development to be realised, has entailed some measure of institutional innovation as well as creativity with sourcing financing.

Part of a bespoke comparative study, our cases have been purposefully selected to bring into view a variety of processes relevant to large-scale developments across a range of different contexts. Our three cases stretch across divergent political and institutional contexts (late-democratic, early democracy, and bargained authoritarian contexts), and incorporate a variety of municipal financial regimes (metropolitan-scale revenue from general taxation; blended municipal property taxation at a city-wide scale; contributions from central government; and planning gain or land sales incomes based on land value uplift) as well as central-local state relations (centralised and hierarchical in the UK, closely managed with extensive inter-jurisdictional competition in China, and co-operative in South Africa). Although each represents an exceptionally large and ambitious development in their own context, the cases are very different in scale and budget – from tens of thousands of new housing units planned in Johannesburg and London, to an ambition to create a new city of 800,000 in Shanghai. The annual infrastructure budget in Lingang at the peak of the project (around 21 billion Yuan – see Section 2.1 below) is similar to the overall infrastructure budget of the London case, and greater than Johannesburg's city-wide capital budget. The London and Shanghai cases involve discrete development areas within the city-region, which is common to most large-scale urban developments, while the Johannesburg project stretches along transportation routes across the city. At first sight the sizes of the three urban contexts may seem disparate but at a functional metropolitan region scale, they are, respectively, around 24.2 million (Shanghai Municipal Government), 15.2 million (Gauteng City-region) and 24.2 million (London's wider southeast region – GLA, 2017) – all very large urban regions by twenty-first century standards.

Our comparative approach opens up the possibility for analytical insights which do not begin with *a priori* theoretical notions, or seek simply to confirm or elaborate on pre-existing concepts based on certain kinds of urban contexts. Rather we see comparative analysis as providing the opportunity to work with the variety and diversity of urban experiences to potentially expand the conceptual repertoires of urban studies. Comparative analysis can support generating and not simply revising existing concepts, making them perhaps more relevant to a wider range of urban contexts. While we don't want to treat specific urban outcomes as simply contextual variety leading to the "variegation" of wider processes such as neoliberalisation (Peck, Brenner and Theodore, 2010; Peck, 2017) or financialisation (Aalbers, 2016), we do take seriously that these processes are at work in all three contexts we discuss – raising finances based on the fictive market value of state-owned land in Shanghai; the withdrawal of the central state from

financing urban development in the strongly neoliberalised London context; and the opening of Johannesburg municipal finances to the international bond market are all in evidence.

But we want to point our analytical lens in another direction. This relies on a different theoretical starting point, one in which our focus is on the territorialisations of urban processes – in our case, the large-scale urban development. We therefore note the suggestion that the urban is always a specific category Schmid (2015) – not a variation on, or meeting point of, pre-conceptualised wider processes and connections (Jacobs, 2006; cf. Hart, 2016; Peck, 2017). From this perspective we see urban territories as complex, transcalar outcomes ("assemblages" as Allen & Cochrane, 2007, helpfully propose), where "context" and "wider processes" cannot be counterposed. If each urban context is a specificity, then the comparative process of building concepts across different outcomes ("thinking through elsewhere") is a different exercise than identifying variegations of pre-existing circuits. Building insights from specificity opens to the possibility of bringing new kinds of (urbanisation) processes into view (Schmid et al., 2018). This could involve proposing limited "generalisations" across different cases which remain close to the experiences of each (Lancione and McFarlane, 2016); or working towards insights on widely shared urbanisation processes, deploying comparative analysis to detect "a bundling of characteristics, common underlying mechanisms, logics, regularities and common traits in the way urbanisation unfolds and proceeds, thus producing similar outcomes" (Schmid et al., 2018: 30). In this perspective, "wider" or circulating processes such as neoliberalisation or, say, gentrification, need to be precisely named as "conceptualisations", and not identified as if self-evident (Le Galès, 2016). Moulaert et al (2003, p. 59) do not go so far as this, but in their methodological reflections on their exemplary cross-national comparison of large-scale urban developments in Europe they note both the interpretive frame of "globalising" processes (chiefly neoliberalisation and economic restructuring), and the potential to build insights across specific urban experiences. They observe that, "Comparing the local fashioning of global dynamics, therefore, remains a precarious exercise. Still, as the following case studies show, such a comparison is worth undertaking, because it allows an analysis of the generality of some of the accumulation and exclusion/integration processes, while situating these processes within the thick embeddedness of local socio-economic and institutional dynamics".

In our comparative analysis, we found that building conceptual insights from the specific experiences of different urban contexts was especially helpful in considering questions of urban development politics and governance innovation. Each of our cases evidences the strong path dependencies which characterise urban governance. As Schmid's (2015) regulation theory inspired concept of a "*Rapport Territorial*" evokes: "a territorial relationship which generates a contradictory and complex system of dependencies, jurisdictions and rules. This system is not static, but dynamic and contested; rules are constantly being breached and questioned, with the result that the system also changes with the passage of time. The framework of rules that ensues from this, the territorial regulation, is complex, since it consists not only of laws, bylaws and prescriptions, but also of diverse unwritten, implicit rules; as a result it is often barely comprehensible to outsiders – and even so to insiders" (p. 297). We set out our comparison, then, to build insights into the governance of large-scale urban developments in three specific urban contexts, through placing them into conversation with one another. Rather than telling (yet another) narrative of globalising processes such as neoliberalisation or financialisation – important as these are – we have brought into view the institutional configurations, financing and distinctive outcomes of the three large-scale developments. On this basis we can compare the shared challenges of bringing a large-scale development into being and the different ways in which this has been conceived and achieved in each context. And we can allow these similarities and differences to inform both analytical and political assessments.

Given the diversity of global urban experiences, it is essential that

comparisons do not begin with a normalised interpretation of case studies in which the relevant processes are already identified in theory, often accompanied with a pre-determined political judgement. It is essential to seek to think anew across a diversity of contexts, potentially expanding the conceptual horizons for understanding the politics of urban development, and divesting ourselves of the inherited weight attached to the US experience (Lauermann, 2018; Robinson, 2018). Instead we interrogate systematically how path dependent institutional and financial configurations are shaping large-scale development projects, the quality of outcomes, and the potential for these developments to be configured in ways that deliver stronger public benefit. This is important, for example, for assessing the rise in interest, especially amongst international policy makers, in extracting value from the urban environment for developmental benefit (Berrisford, Cirolia, & Palmer, 2018; Turok, 2016). And is made all the more urgent with the significant expansion of global urban investment in urban development in rich and poor contexts alike, associated with private, sovereign and developmental interests (Brenner, Marcuse and Mayer, 2012; Cain, 2017; Haila, 2015; Parnell, 2016; van Noorloos and Kloesterboer, 2017).

### 1.2. Learning from large-scale urban developments

Through our comparative study, we seek to contribute to critical analysis of the governance of mega urban projects, in particular development corporations and bespoke large-scale developments. Mega-urban projects have attracted interest in the literature for a variety of reasons. They famously embody grandiose claims, generating a rhetorical flamboyance designed to secure the political constituency to realise them, with frequently negative implications for cost over-runs, feasibility and outcomes (Flyvberg, Bruzelius, & Rothengatter, 2003). They focus attention on questions of temporality, and can exacerbate the uneven impacts of political and economic uncertainty on urban development (Adama, 2018; Gualini & Majoor, 2007). In addition to relying on complex intra-governmental negotiations (Adama, 2018; Bon, 2015), they also highlight questions of a democratic deficit, with limited participation often identified as a feature of mega-urban developments in advanced democracies (Lehrer & Laidley, 2009; Swyngedouw, 2005). In non-democratic political systems they can involve the use of peremptory powers to realise the potential for vast rent gaps through changing land titling arrangements from traditional tenure to government ownership (Shatkin, 2017), or through rural to urban land use changes (Hsing, 2010). Complex informal negotiations through which such large-scale developments are able to emerge mean that highly individualised (Weinstein, 2014) or associational and corrupt forms of state action (Adama, 2018; Kinossian, 2012) are only the more direct manifestations of a more general role for informal modes of governance in realising mega-urban projects.

Authors also direct attention to the often powerful transnational actors involved in their motivation, design and realisation (Dixon, 2010; Olds, 2001). While the formulation of large-scale developments as exceptions to the urban and political fabric can enhance their alignment to external and powerful interests, and perform a significant exclusion or too often displacement of poorer residents (Murray, 2017; Watson, 2014), it is also the case that a range of different actors and constituencies can stall or even halt such developments (Datta, 2015; Roy, 2011), and that the outcomes might be deviated to benefit other constituencies (Buire, 2014; Van den Broeck, 2017). Some commentators stress the potential they bring for general improvements to the urban environment, and realising broader strategic urban and developmental goals (Oosterlynck et al., 2010). Displacement is an important focus of studies of large-scale developments, with strong influence from Asian experiences (Shin, 2016). But, in our Shanghai, London and Johannesburg studies the impacts on residential communities are more diverse than this. In Lingang, while some residents who are not in the core area of development have been left out of the process of development altogether and have strongly contested the *in situ* marginalisation which has

resulted from this as settlements and services have been depleted (Wang and Wu, 2019; Wang, 2020), others have been generously compensated through resettlement housing and allocation of land and financial support to their township government to set up their own development zones to generate income streams for the benefit of local communities. In Johannesburg the development we discuss is focussed on bringing lower income residents closer to the inner city and has needed to build community support to progress (Planact, 2018); and in London while community engagements in place-making have played a role (albeit ambivalently) in the planning process, there has been little mitigation and no compensation for the impacts of the development on existing residents – to the complete surprise of Chinese partners in this research on visiting the London case study neighbourhoods.

There are many lines of analysis open, then, to those interested in mega-urban developments. We have been directly influenced by the interest in the governance innovations which their complexity and time-scales stimulate (Fainstein, 2008; Gualini & Majoor, 2007; Swyngedouw, 2005). Authors have observed that such developments are sites where new contributions to urban governance might emerge – whether this be the liberalisation of land markets (Fainstein, 2001; Thornley, 1991); the transformation of modes of operation through involvement of transnational actors such as international design and construction firms or transnational investors with new expectations reshaping governance norms (Olds, 2001; Guironnet et al., 2016); the generation of new forms of “post-political” engagement with affected constituencies (Swyngedouw, 2005); innovations in instruments for managing governance, such as through contracts (Raco, 2014a,b) or new financial instruments (Haila, 2008); or experiments with cross-subsidising housing for the poor through developing high end and high-rise housing in slum areas (Weinstein, 2014). All of these are relevant to the cases we discuss below.

Direct comparisons of cases of mega-urban developments are rare – the research effort required is vast, across long periods of time and with many actors involved. We were able to benefit in our study from long-term and ongoing research projects by each collaborator to design a bespoke comparative exercise able to cope with these challenges. In the literature to date, comparisons of large-scale urban developments have mostly been implicit (a case in conversation with the existing literature e.g. Kinossian, 2012) or opportunistic (bringing together cases pursued for divergent research interests e.g. Fainstein, 2008). Of the few bespoke comparisons, we note that some have suffered from a determined theoretical integration into a pre-established analytical frame or research problematic – social innovation; neoliberal governance (Moulaert et al., 2003; Oosterlynck, Van den Broeck, Albrechts, Moulaert, & Verhetse, 2010). Olds (2001) deferred from offering a comparison, suggesting his was a “non-comparative comparison”, but in tracing the different transnational circuits shaping two developments (Pudong new district in Shanghai, and One Canada Water in Vancouver), he offered a prescient case of “genetic” comparisons based on interconnections (Robinson, 2016). The ways in which the two developments emerged in the intersections between different, overlapping globalising circuits and actors and embedded governance processes was the major theme of his work.

Closest to our efforts here are the more recent contributions of Shatkin (2017) and Kanai and Schindler (2018) and Fainstein’s three-way consideration of the US, UK and the Netherlands (2008). Fainstein (2001) had drawn a tight boundary around her two primary cases of New York and London, seeing them as the making effectively one case (global city) based on their integrated and closely connected economies and policy circuits, as well as their shared distinctive role in the international urban system. Her later reflections including Amsterdam bring a more nuanced assessment of the difference that government commitments to public benefit can make, especially in residual welfare states, while stressing the similarities in the resultant built form as all three must seek profits to fund the development. Here our case study confirms her focus on the shared need to generate income through the

development in order to pay for it. But we widen the range of contexts considered, which brings into view the potential for more differentiated outcomes, depending on the governance context and business models adopted.

For Shatkin, and Kanai and Schindler, each finds innovative grounds for comparing their cases of large-scale urban developments - the rent gap which opens up a space of value capture in the Asian cases of Shatkin, exposing the diverse politics of urban development; and the circulating infrastructure-led models of urban development which inspired large-scale developments in two very diverse cases, Manaus, Brazil and Bagomoyo, Tanzania for Kanai and Schindler. While Kanai and Schindler used their cases to identify the wider circulating policy processes associated with a “scramble for infrastructure”, seeing their cases as “genomic” examples in a genetic comparative mode, Shatkin used the shared phenomenon of the “rent gap” (thus, a “generative” comparative strategy) to identify the diverse governance forms at work in each of the three cases of large-scale development he studied. From this he proposed some analytical insights which have the potential to stretch urban studies to build theory from the experiences of Asian cities, concerned with the central role of the state in land ownership and management in different Asian contexts. Our project has most in common with Shatkin’s approach. But we seek to expand theoretical insights from cases across different regions; and we ground our comparison more broadly – on the shared features of the large-scale development project, rather than the “rent gap”, focussed specifically on the politics of land value (Weber, 2015). We build understandings across diverse forms of value realisation and the institutional configurations which enable large-scale developments – the “business model”.

Our three cases are located in quite different national political contexts, across the putative global north, south and east; but the state is a central actor in all. How do we deal with this? Firstly, we note, following Jessop’s (2002, 2007) strategic-relational approach to the state, that urban studies needs to embrace a wide range of regulatory contexts and path dependent state forms. He indicates, for example, that neoliberalisation can be associated with different political aims (such as developmentalism in South Africa, to follow Ferguson, 2010; or party-led state in China, to follow Wu, 2017). And also that a variety of regulatory regimes coexist alongside neoliberalism as possible responses to the challenges of globalisation: he identifies ideal types of “neocorporatism, neostatism, and neocommunitarianism”. As we proceed through our cases, then, we are keenly aware of the need to consider large-scale urban developments across a diversity of political formations. This variety has been valuable, as it has allowed us to look differently at each case. For example as the state in Lingang is involved in every stage of the development process – as policy maker, regulator, financier, investor, developer, political representation – we looked again at the other two cases to see how these different state roles shaped outcomes. Most notably, this helped us to identify in London a conflict between the state as policy maker and regulator, and its interest in value extraction to realise its goals.

Secondly, in our comparative analysis we focus closely on urban dynamics, and adopt a strongly “transcalar” approach to urban development. Here we build on conventions in state theory which insist on the complexity of state structures, with relative incoherence of programmes and agendas across a great diversity of institutions (Jessop, 2007; Miller and Rose, 1990), and a fragmented territorial assemblage of state capacities formally attributed to different scales or hierarchical structures (Allen & Cochrane, 2007). Grounded on the shared challenges of facilitating large-scale urban development, we focus on how, in all three contexts, state actors from different branches and hierarchical levels, alongside private sector and community-based actors, were drawn together into a “transcalar territorial network” (Halbert & Rouanet, 2014) operative at the scale of the project (Pinson, 2009). Different national legislation, planning procedures, taxation regimes and institutional capacity matter greatly to the outcomes in each case; this provides a great deal of variety to think with in our comparative analysis, which is

a key part of our research design. We mobilise these differences, where appropriate, to inform and caveat our claims and insights. However, there were also important similarities. In all three cases the central government played a major role in supporting and/or financing the core infrastructure which underpinned the development potential: a deep water port at the end of a 32 km road bridge over the sea in Shanghai; a major north-south rail route from London; and a bus rapid transit system in Johannesburg. In each case state actors from across the institutional hierarchy worked in new ways to orchestrate the development. And across all cases the urban dynamics of the development shaped comparable practices and outcomes e.g. in terms of value creation from the development, land use management, navigating the long term and changing nature of the development, and the involvement of many different state actors.

Bringing these three cases into comparison has highlighted the significant difference that institutional and financial architectures make to the outcomes and potential of urban development. We discuss this more fully in the Conclusion to the paper. Impressive is the difference that the territorial configuration and sources of financing, as well as the form of anticipated returns from development makes. Municipal- or metropolitan-wide financial sources, linked either to general taxation and revenue (Shanghai) or blended property taxation (Johannesburg), offer significant room to manoeuvre in securing and prioritising strategic aims (Shanghai) and public benefits (Johannesburg). Returns are collectivised at a city-wide scale and goals can be set for a development which are not simply about maximising returns from lucrative ‘land business’ or highest value property development. This limits the kinds of speculative and reduced built environment outcomes often ascribed to neoliberal or financialised forms of development (De Verteuil & Manley, 2017; Guironnet, Attuyer, & Halbert, 2016; Halbert et al., 2016). Blending finance across territories and time can also be beneficial, if a development can draw on income and reserves from earlier investments or benefit from investments in a different location. In contrast, directly extractive models of financing, where business models rely on realizing value directly from the development of the land, say through negotiated planning gain (London) or other forms of ring-fenced land value capture (common in the land business financing many developments across Chinese cities – Shen and Wu, 2017), this can place great pressure on the resultant urban outcomes (Robinson & Attuyer, 2020). Degrees and nature of control over land (ownership and management) are also relevant (Shatkin, 2017). Nonetheless, even in the most extractive case (London), we note the continuing scope for state-led planning processes to seek to secure public benefit from the development.

Specifically, then, the different business models which have come into view across the three projects provide grounds for a new way of thinking about questions of finance and value flows in urban development, reaching beyond the usual narratives of financialisation and neoliberalisation. The diverse forms of mega-urban development are generated through specific forms of territorial regulation and rely on a wider range of ways of financing urban development than rent gaps, land value capture or financialised modes of investment. The business models lead to very different outcomes in the three cases, and require that we revisit Fainstein’s (2008) assumptions concerning the relative convergence of large scale development forms. We broaden the analytical horizons of Shatkin’s Asian-centred insights to build comparative insights across divergent governance and financial systems. In this regard, our comparative analysis demonstrates the value of rebuilding understandings of the core problematics and concepts in urban studies on the basis of the actually existing diversity of urban processes and outcomes.

In the remainder of this paper, we provide detailed and in-depth studies of these three cases. As the paper progresses, we identify some ways in which insights from each case throw distinctive light on the other two – these comments are in italics. We conclude by summarising the ways in which these cases, considered in comparative perspective, extend understandings of global mega-urban projects (Aalbers, van



Loon, & Fernandez, 2017; Fainstein, 2008; Orueta and Fainstein, 2008; Swyngedouw et al., 2002). We identify three specific themes which emerge from our comparative analysis: the role of state interests in shaping large-scale urban developments; the transcalar but territorialised nature of the actors and institutional arrangements which make large-scale developments possible; and the diverse sources of financing underpinning the “business model” in each case. In the conclusion, we synthesise wider theoretical insights from the comparison in relation to theorising from specificity, and the role of the state in urban development. We also draw out some implications for policy, highlighting the impacts of different business models for the outcomes in our three cases, notably in relation to the territorial and institutional forms of financing urban development.

## 2. Upgrading the economy: A cost-recovery business model in Lingang, Shanghai

### 2.1. Lingang: a strategic project for upgrading Shanghai's economy

Shanghai has always been an industrial locomotive of the new China. However, in the early years of economic reform, in contrast to foreign investment-driven industrialisation in southern China, the state-owned enterprises in Shanghai experienced serious difficulties and mass lay-off of industrial workers. The designation of Pudong as a major development area was a national strategy to revitalise Shanghai and develop further the Yangtze River delta. China joining the World Trade Organization (WTO) in 2001 greatly stimulated Shanghai's ambitions as a globalising city (Wu, 2000). As will be shown later, this infrastructure-led and land driven development in Shanghai, most visibly in Pudong, has always been associated with state ‘strategies’. In competing with other cities in the region for retaining and attracting manufacturing industries, Shanghai's entrepreneurial endeavours resulted in extensive urban sprawl. Shanghai has also been key city in the centrally-directed economy for a long time, its development often embodies national economic priorities. This can be seen in its earlier development of international financial and shipping centres and more recently in advanced and strategic manufacturing industries. These three features can be seen in the case study we discuss here, of Lingang: It is state-led, reflects national priorities of economic upgrading, and is a response to problems of urban sprawl as a new satellite city.

In this context, the origin of the Lingang project can be understood through its association with the development of Yangshan deep-water port, which was critical for developing Shanghai as an international shipping centre. The port project was launched in 2000, funded by the municipality but receiving significant political support from the central government who negotiated access to the island from neighbouring Zhejiang government. This was recognized as a good opportunity to promote the restructuring of Shanghai's economy. Initially, it was believed that the port would promote the development of a port-related economy, bringing about clusters of maritime business services and industries, logistics as well as a resident population. As part of Shanghai's new town program, a port city known at that time as ‘Harbour New town’ was therefore proposed to be constructed in Nanhui. The idea was known as ‘the port works for the city, the city prospers for the port’ (Interview, academic, Sept 2015).

Initially, the municipality decided to develop an industrial zone in the area. Shanghai had long been the significant industrial base of China. But since the late 1990s, facing increasing competition from nearby Zhejiang and Jiangsu provinces which were able to provide cheaper land and labour, Shanghai began to lose manufacturing investment (Li & Wu, 2012). In response, Shanghai was searching for some emerging industries in order to maintain its strength in manufacturing. International consulting firms, such as McKinsey from US and Nomura Research Institute (NRI) from Japan, were invited to identify what kind of industries would be promising in the future. It was suggested that there was an on-going shift of equipment manufacturing from developed

countries to developing countries and that this could be a focus for future industrial development in Shanghai. The initial conceptualization of Lingang mega urban developments is associated with global policy mobility as part of Shanghai's endeavor to become a global city (Wu, 2000).

The current Lingang area was recognized as an ideal location for this industry, to capture the development opportunity created by the Yangshan deep-water port. In order to support the port project, Shanghai had already invested in highways and other infrastructure in the area. In addition, as equipment manufacturing needs a large amount of space and convenient water transport, Lingang could provide both large tracts of cheap land and connectivity to the new ports (Interview, planner, Lingang Group, September 2015).

However, although the port itself developed successfully, modern container shipping does not need any onshore logistical services and thus did not promote the development of an urban economy in Lingang. The development strategy was then shifted from ‘to promote the city through port development’ to ‘promote the city through industrial development’ (Shanghai Academy of Development and Reform (SADR, 2015:2). To a large extent, therefore, on the strategic map of Shanghai municipal government, Lingang has become an industrial base rather than a site for the expansion of urban development stimulated by the port. Moreover, from then on Lingang assumed the responsibility to pioneer high-value added manufacturing and strategic emerging industries. As recently stated by the mayor of Shanghai, ‘Lingang is the significant strategic space for Shanghai's future development’ (Tan, 2018). Despite the recent shift from heavy manufacturing to innovation and new economies, then, Lingang remains a strategic project of Shanghai municipal government.

From the beginning, then, the Lingang project was a long-term strategic project of Shanghai and was not intended to generate quick economic profits or enable social redistribution. Instead, it has assumed the task of starting a new economic growth pole for Shanghai. In this sense, the business model of the project cannot be evaluated through assessing the economic input and output in Lingang alone. Looked at from that perspective, the business model would show a loss. For instance, infrastructure investment in Lingang industrial park has far exceeded its economic output. In 2011, among all nine industrial bases of Shanghai, Lingang ranked first in terms of fixed asset investment, but fifth in terms of industrial output per unit of capital investment, and eighth in terms of industrial output per hectare. About eighty per cent of state-owned development corporations in Lingang were operating in deficit (SADR, 2015). Industrial development in Lingang has been achieved through massive investment, although the overall development of Lingang new town is slow and has not generated taxes for Shanghai municipal government (see major economic indicators in Lingang

**Table 1**  
Major economic indicators in Lingang Industrial Park.

	2015	2016
Total amount of tax revenues (million Yuan)	56,299	9,618
Local fiscal revenue (million Yuan)	22,952	2,926
Investment in fixed assets (million Yuan)	21,489	18,586
Investment in industries (million Yuan)	4,305	3,973
Contracted amount of foreign direct investment (million USD)	382	51
Actual amount of foreign direct investment (million USD)	32	115
Gross value of industrial outputs (million Yuan)	26,296	26,025
Total amount of industrial profits (million Yuan)	978	795

Source: Shanghai Pudong Statistical Yearbook 2017.



industrial park, Table 1<sup>2</sup>). Nevertheless, it was considered that Shanghai had achieved a competitive advantage in the emerging trend toward reindustrialization, a strategy that the central government regarded strategically important. Since the 2000s, Shanghai has tried to develop tertiary industries in central Shanghai, while relocating the secondary industries to the peripheral areas. Shanghai, however, faced competition from other cities. The development of its peripheral industrial zones (especially, in electronics and automobile industries) has been difficult. However, Lingang aimed to specialise in heavy equipment manufacturing in association with port facilities. The original expectation that there would be a wave of mass relocation of modern equipment manufacturing industries from Western economies to developing countries like China has not been materialised. Instead, Lingang managed to use large parcels of flat land to accommodate domestic industries and national strategic projects (e.g. manufacturing of large aircrafts). Furthermore, Lingang's development was conceived to counter real estate driven urban sprawl in Shanghai in the 1990s (Zhang, 2000). Lingang's business model therefore represents a departure from earlier processes of land speculation in Shanghai. This has resulted in a relatively slow pace of development and low levels of return compared to the extensive initial infrastructure investment (Figs. 2 and 3).

## 2.2. Financing economic upgrading: Beyond (land-)business as usual

Mega projects such as new towns in China typically operate on the basis of land finance in a two-stage process (Lin, 2014; Shen & Wu, 2017; Wu & Phelps, 2011). Firstly, local governments raise large amounts of capital by leasing out land for residential and commercial uses. State-owned development corporations are set up as 'local financing and investment platforms', also called 'local government financial vehicles' (LGFVs). Land is used as their initial capital for leveraging bank loans, following which state development corporations lease serviced land for commercial and residential projects through competitive bidding at a higher market price. Following this, with land revenues obtained from these land market operations, local governments provide cheap serviced land and preferential policies to attract foreign direct investment in manufacturing industries. The ultimate purpose is not the land business as such, but to promote GDP growth and to generate long-term local tax incomes (Wu, 2017, 2018).

While these goals of GDP growth and tax income were certainly relevant to Lingang, and underpinned the overall financial basis of the development, there were several factors that made the standard land-based 'business as usual' model impossible. First, the location of Lingang far away from the central areas (75 km from the city centre), and at the transport dead-end of the southeast corner of the city, made it very difficult and unrealistic to attract population from the central city. Furthermore, as explained the deep-water port did not bring about clusters of port-related industry. There was a concern that land sales would yield just a one-time income, and that once the land was sold to speculators, Lingang could become a ghost town. In other words, with little market potential, land commodification was infeasible in Lingang.

Much has been written about the land-business driving local government finances and overall urban development across Chinese cities (Lin, 2014). The case of Lingang highlights instead the second arm of the overall business model for municipal development strategies: the use of metropolitan-scale resources and state-owned development corporations to promote long term economic development and yield a stable tax base. *These broader, strategic interests of state actors in Shanghai therefore shed light on the wider analysis of Chinese urban development. This observation was also influential in our assessments of the other two cases. It helped*

*us to identify the way in which developmental interests initially dominated in Johannesburg, while in London the form of financing, dependent on yielding maximum value from the development, constrained the wider interests of state actors, for example, in securing affordable housing and wider public benefits.*

In Shanghai, however, given the strategic significance of Lingang, the potential for land development, either in term of land revenue or tax income, was less of a consideration. The Lingang Group, responsible for the industrial development, was evaluated based on whether their corporations could help promote equipment manufacturing in Shanghai, while Gangcheng Group, linked to the district government, focused on attracting population and developing the main urban area<sup>3</sup>. As one representative from Lingang Group noted, as a functional type state-owned enterprise with a specific remit<sup>4</sup>,

We are not evaluated in the light of whether we can make a profit or not. We are just required not to lose. The government mainly evaluates our performance based on what kind of companies we have introduced to Lingang and whether they would help the overall development of local economy (Interview, Planner, Lingang Group, September 2015).

As in many other suburban new town developments in China, Lingang is a typical mixed-use project, consisting of an industrial area (241 km<sup>2</sup>) and an urban area (70 km<sup>2</sup>) – see Fig. 4. In this case, the two parts were developed by two different state-owned development corporations affiliated to the municipal and district governments respectively. Because the project was in Nanhui district, in order to get the support of the district government for the development, the potential benefits of the urban development were given to the district. Gangcheng Group, a district development corporation was therefore established to carry out the development of the urban area. It was therefore also as a result of this political accommodation that the land revenue of Gangcheng Group could not be used by Lingang Group to promote industrial development. The introduction of two development corporations has led to some institutional fragmentation and separation between industrial (in the heavy equipment manufacturing zone) and residential and commercial functions (in the core new town).

In addition, as each of the development corporations embarked on their programmes of industrial and urban development, they had to address significant challenges along the way. Although initially targeting global industrial investment, industrial development in Lingang largely attracted domestic rather than foreign investments. According to a key leader of Lingang Group, the state development corporation in charge of industry development in Lingang,

The world map of industrial distribution had undergone great restructuring by 2004–2005. While ordinary manufacturing industries in developed countries had moved out of developed countries, those staying put were their core competitive power (which would not be relocated to other countries). In fact, at this stage of industrial development, the way of relying on foreign capital to promote industrial upgrading had come to an end. It is necessary to work on 'large industries' with 'indigenous' intellectual property rights and brands (Interview, a leader, Lingang Group, 2016).

Furthermore, in 2006, the central state introduced policies

<sup>3</sup> Because Lingang is a large area, the development was under taken by two major development corporations: municipal-level Lingang and district-level Gangcheng.

<sup>4</sup> In Shanghai, there are three types of state development corporations. Corporations of public-service-type are responsible for delivering public services. Since they can hardly recoup investments, they are directly subsidized by the state. Corporations of function-type are established for carrying out specific tasks. They are evaluated based on the completion of the tasks, but they need to maintain budget balance themselves. Corporations of competition-type are evaluated based on economic performance.

<sup>2</sup> The figures in these two years are only indicative about the scale rather than a trend, because as a development area, the development is always fluctuating; due to statistical reasons as well as the changing environment (e.g. the decline in foreign investment).

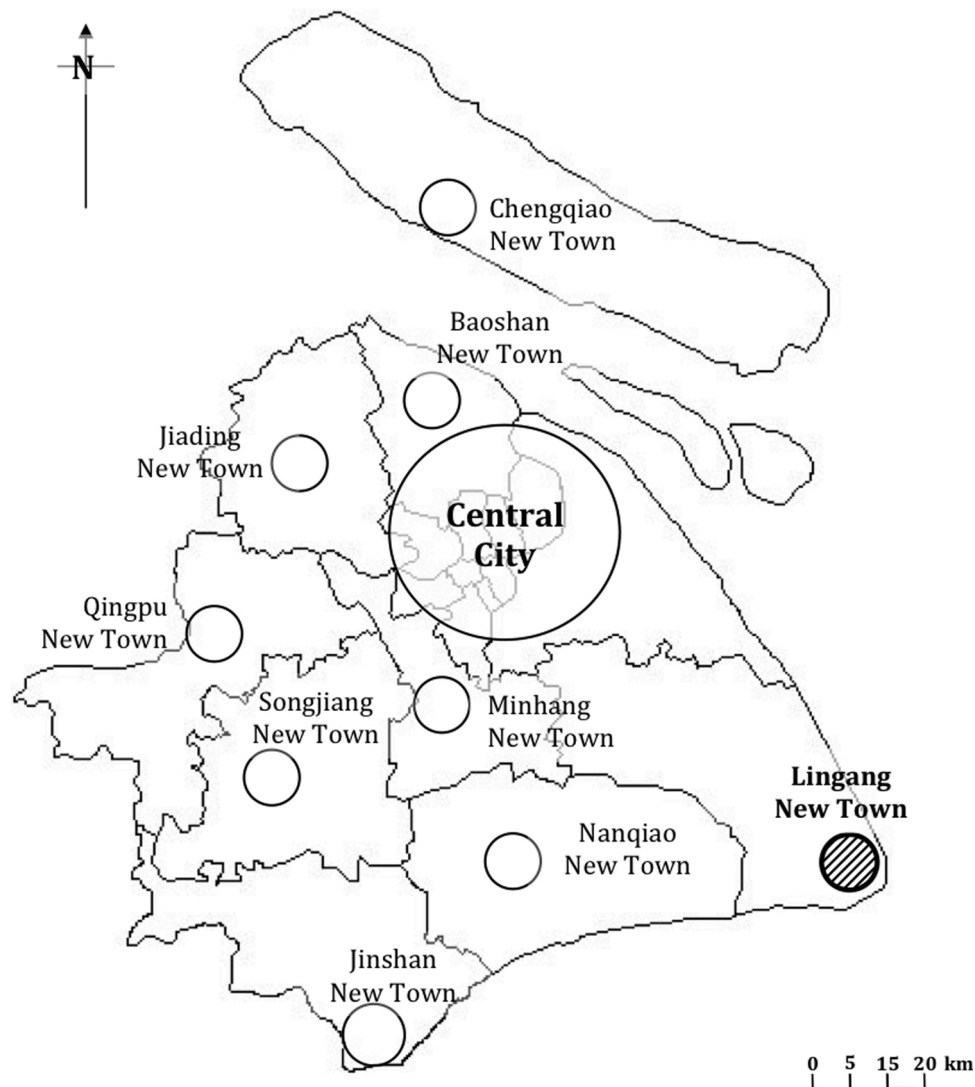


Fig. 2. Map of Shanghai showing Nine Planned Satellite Cities.



Fig. 3. Photo of Yangshan Deep Water Port (authors' own).

promoting the equipment manufacturing industry as a national economic development strategy (Guofa, 2006). This strategy is similar to that promoting 'indigenous innovation' to capture higher value added

economic activity which led to the establishment of Zhangjiang High-tech Park in Pudong (Zhang & Wu, 2012). In response, Lingang Group changed the original strategy and began to target large domestic companies, including Shanghai Electric, SAIC Motor, China State Shipbuilding Corporation, Sany Heavy Industry Corporation, amongst others. The strategy was designed 'to reflect national strategy, Shanghai's advantages and international competitiveness' (Interview, Planner, Lingang Group, September 2015; Lingang Area Management Committee, 2015). Benefitting from a series of preferential policies from the central government, such as direct subsidies and low-interest bank loans, many of these companies focused on independent technological innovation and have since come to be dominant in the international market (See Figs. 5 and 6).

In relation to urban development the strategy of the Gangcheng Group was to promote Lingang through improving the urban function. Even though, as mentioned by many interviewees, in Lingang, land sales and real estate projects were clearly the only business that would not lose and would bring about quick return, the municipality's aim was to support continuous population growth and sustainable economic prosperity. Consequently, land speculation and real estate projects were strictly restricted. Instead, functional and non-profitable projects have been intensively developed. Tourism was greatly promoted as a way to bring people to Lingang, to benefit from the lake, and to create an urban atmosphere. Key projects included theme parks, museums, sport centres,

conference centres, and hotels. Some of these projects were developed by state development corporations. For example, the Lujiazui Group was required by the Pudong district government to invest in a project in Lingang. As a condition of undertaking some residential development, they had to invest in and operate a conference centre and a hotel in Lingang (Interview, project manager, Lujiazui Group, August 2016). Private developers in leisure and tourism projects were also welcomed. For example, one of the few private investors in Lingang was Haichang Holdings, which is the largest marine theme park operator in China. Its project, Shanghai Haichang Ocean Park, was finally located in Lingang because it was hoped that tourism would attract a resident population. However, the request of the company for residential development to accompany their tourism project was rejected.

We absolutely wanted to undertake real estate projects. It would be too slow to recoup the investment only from ticket sales. We always had some real estate developments in other cities, but it was impossible to negotiate this in Shanghai (Interview, planner, Haichang Holdings, August 2016).

Meanwhile, in order to attract residents, fixed-price apartments (for lower-income groups) with a total floor area of 1 million square meters and public rental housing with a total floor area of 2 million square meters have been built. Employees of enterprises registered in Lingang were qualified to apply for these two kinds of housing, as long as they worked in Lingang for more than one year. In addition, quality health and education facilities were also developed: in order to persuade well-known schools to establish branches in Lingang, Gangcheng group even built campuses and donated them to the schools for free (Interview, official, Pudong district government, November 2016).

Infrastructure investments are an important driver of the business model in all three of our cases – but each has approached the question of cost-recovery differently, depending on the particular regulatory and fiscal arrangements, with different outcomes in each case. In Lingang, the overall costs of the infrastructure investment placed some pressure and limits on what kinds of development could be brought forward in the core urban area of Lingang. From Table 1, it can be seen that a substantial amount of investment was made, over a long period of time, in the ‘fixed assets’ (land and the built environment) – around 2 billion Yuan in each of the years covered by this table. Given the location of Lingang, at some distance from central Shanghai, demand for housing there remains low. Thus, it would not be sufficiently profitable to seek to recover the cost of this investment just from the industrial or residential real estate development. Moreover, if the development were to be driven by real estate projects, real estate developers would capture the land value rather than allowing the municipal government to recoup its investment (actually its development corporations). Therefore, private developers are introduced only if they can help to realise the government’s ambition for economic upgrading through investing directly in industrial development, indirectly providing services to the working population or attracting more people to the new town. Because the land is ‘expensive’ due to the initial investment in infrastructure, the former chief planner of Lingang (interview, August 2015) observed that it had been ‘very unwise’ even to lease land to universities, rather than reserve it for higher value activities – although it is understood that they do help to increase the population for the new town.

### 2.3. Land allocations and tax flows: a municipal business model

Under China’s contemporary land development system, urban development is usually carried out through two kinds of development. State-owned development corporations carry out primary development. Their tasks are first to raise money to assemble land and develop infrastructure, and then to lease the serviced land to investors. With initial capital from the state, in the form of cash or land, they act as a market player and need to complete their task through market operations. Developers that obtained land from the primary developers are known as secondary developers. Most secondary developers have been

private developers, as state development corporations have been less competitive than private developers in public bids (Interview, officer, Lujiazui Group, August 2016). However, in Lingang, private developers have been strongly restricted in order to prevent speculation and ensure that the development corporations and municipality can recoup the costs of land development.

In addition to the Lingang Group of the municipality and the Gangcheng Group of the district government, which are the two major primary developers, an additional group, Lingang New Town Investment and Construction Corporation (Lingang Chengtou) is responsible for financing and developing infrastructure in Lingang. These primary developers then cooperated with other corporations through joint ventures for specific projects. As the primary developers were state-owned enterprises of the function-type, their performance is evaluated based on the completion of their tasks. Making profits is not their ultimate aim.

Secondary development in Lingang included industrial projects and urban projects (residential, commercial and other business projects). In terms of total amount of leased land, the former business went much better than the latter. The total new-added construction land from 2004 to 2012 in Lingang was 44.7 km<sup>2</sup>, amongst which industrial projects and business projects comprised 17.6 km<sup>2</sup> (37 %) and 7.6 km<sup>2</sup> (17 %) respectively (Shanghai Urban Planning and Design Research Institute (SUPDRI), 2013). Land leasing in the urban area encountered great difficulties as a result of the locational disadvantage (distance from central Shanghai). Moreover, the task for Gangcheng Group was not to sell off the land but to attract population. As a result, private secondary developers have been quite limited in Lingang.

Instead, a number of additional municipal and district state-owned corporations have been required to undertake secondary development in Lingang. In the words of one interviewee from Lujiazui Group, this was largely a political task because commercial projects in Lingang could hardly make a profit:

So in comparison [to the private companies], our company is a state-owned enterprise directly under the district government, or in other words, a son of Pudong. We were asked to support another son. For companies outside the system [tizhi wai], if you don’t let me earn money, why should I invest in Lingang? That would not make sense (Interview, officer, Lujiazui Group, August 2016).

Rather than leasing land to these state-owned development corporations, Gangcheng Group cooperated with them through joint ventures. For example, the project of Lujiazui Group was carried out as a joint venture of the two groups. The joint venture then obtained the land through public auction as a secondary developer. Meanwhile, in some cases, the additional state-owned development corporations wanted to undertake primary development. For example, Zhangjiang Group, another state-owned development corporation of Pudong, chose to develop a project from scratch. Its strategy was to develop an R&D centre first and then get returns from office rental and commercial business later:

The environment is not good for us [as state-owned development corporations]. The earlier business model, i.e. to undertake primary development based on land finance, has been banned. Secondary development won’t work as well because the land price is too high. Our strategy was to bring out expertise to bear on attracting R&D enterprises. If we did secondary development, the development of the surrounding area was out of our control. Only being a primary developer, we can implement an overall strategy (Interview, planner, Zhangjiang Lingang Project, August 2016).

The practice of Zhangjiang Group in Lingang shows that the key state-owned development corporations could not adopt their usual model of land profit-making but had to prioritize their core business, attracting R&D enterprises, to achieve its mission assigned by the municipal government.



In sum, state-owned development corporations are dominant players in the development of Lingang. They not only act as the primary developers but also carry out development as the secondary developers. Since these secondary developers are assigned different tasks, their business model varies. But even secondary developers (using the serviced land to develop properties) could not behave in the usual way as real estate developers but had to agree to meet municipal objectives. This points to the distinctive forms of financing and institutional formation evident in the development of Lingang, which go beyond the usual land-business underpinning much urban development in China. *As with all three developments, the need to cover the costs of infrastructure and other expenses in bringing forward the development from the development itself and the activities it generates is clear. In this sense all three business models we discuss in this paper are distinctly urban development models.* The next section outlines the range of business models which have shaped the Lingang development.

#### 2.4. Land, debt and economic functions

The Lingang area is not governed by a pre-existing sub-municipal level of government. Rather, the area as a whole has been governed by the Lingang management committee, a streamlined government agency directly representing the municipal government of Shanghai and with strong autonomy, dedicated to bringing forward the Lingang development, as a planning and approval agency. Thus, the Lingang development formed an exception to usual arrangements, including ringfencing financial returns from the development (Shen, Luo, & Wu, 2020). Complex innovations in governance structures were needed to co-ordinate across the numerous actors involved. The area consists of a series of industrial areas, the New Town, and smaller towns established earlier under the district government (see Fig. 4). Alongside the different levels of government involved (state, district, town) the key actors in the development are development corporations. This includes: a state-owned enterprise originated from a development corporation which had been responsible for developing an industrial zone in central Shanghai; a district-level government corporation; various other town-level corporations; and, brought in later in the development, four other development corporations which had been responsible for developing Pudong new district. All of these entities brought in resources with them to support the development in Lingang. Co-ordination has been a major challenge, and as the development unfolded, “hierarchical state forms were complemented by emerging horizontal and networked forms of governance, and original administrative levels and boundaries were relatively blurred” (Shen, Luo, & Wu, 2020, p.9). Mechanisms for co-ordination varied over time and were essential to manage competition, conflicting interests and different levels of commitment across different actors. These included initially bringing together personnel from the key entities and institutions. But also crucial was mobilizing market mechanisms to co-ordinate state action amongst actors (Wu, 2018), including stimulating joint ventures. Separating out key state functions according to different institutions also emerged as a strategy of co-ordination, with the management committee as regulator; the state-owned enterprises as market actors; the township committees as social management agencies (Shen, Luo, & Wu, 2020). A transcalar state agency, then, was assembled across a complex array of actors and institutions. This section will outline the development process in Lingang, highlighting the institutional challenges of co-ordinating the

development across these several actors.

#### The key developer: Lingang Group

The key development corporation, Lingang Group, responsible for delivery of the industrial park of Lingang, is a ‘state-owned enterprise’. As shown in the ownership structure, Shanghai State-owned Assets Supervision and Administration Commission (SASAC)<sup>5</sup>, is the largest shareholder, and is the ultimate owner of the Group. The corporation is in fact the only large state-owned enterprise which operates as an industrial park developer directly under the ownership of Shanghai SASAC. The corporation was established in 2003, just after the decision to develop Lingang. The initial capital was three billion Yuan, invested by Shanghai SASAC and other development corporations. The ownership structure in shown in Table 2.

For the Lingang Group, its mission was to implement the strategy of industrial development, which is set by the Shanghai municipal government. In other words, the corporation was required to develop the industrial areas through market operations. But it was not asked to make a short-term profit. Similar to many other development corporations in China, its initial capital was from bank loans. The bank loans were ‘guaranteed’ by the government and ‘secured’ by land – vaguely the space in the region.

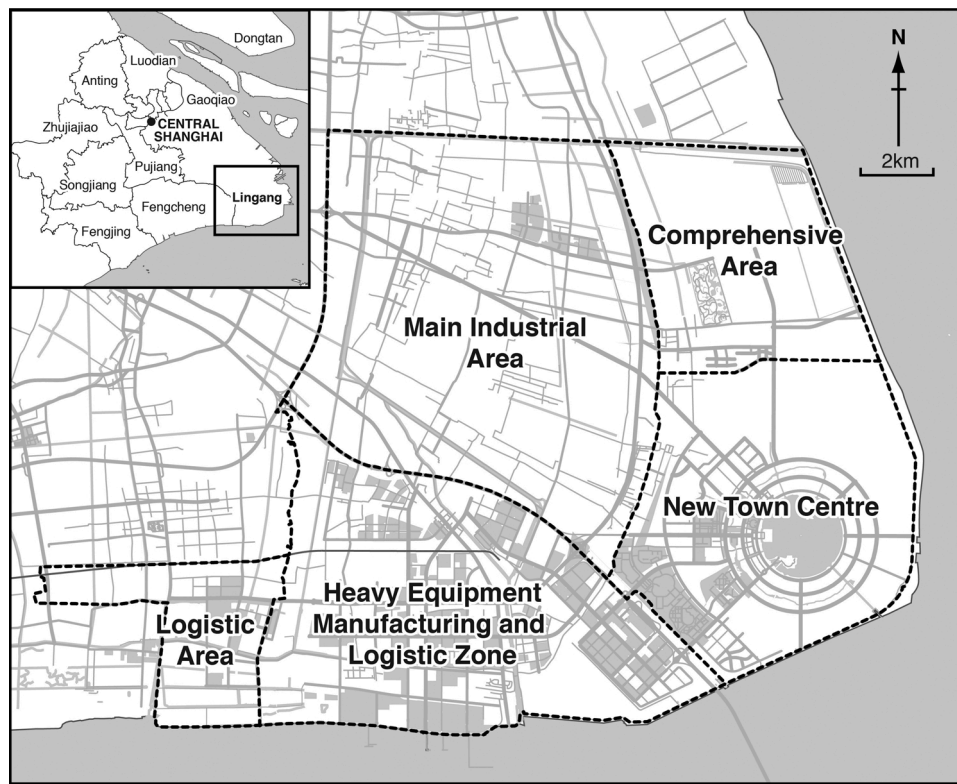
This is in essence a debt-driven model. Its viability is based on the ultimate increase of industrial output in the jurisdiction where industrial enterprises are registered, which is returned to the local government in the form of taxation to pay back the debt. For this purpose, the municipal government of Shanghai set up a special tax-retain policy for Lingang. It returns all taxes generated from the companies in Lingang to a special Lingang fund. With this, the corporation can be reimbursed for its investment in infrastructure and public facilities. Since 2015 this model has become more generalized, as the central government has forbidden the local government from using development corporations to raise the capital which they then invest in the corporation. Hence, in this case the Lingang Group, representing the government in undertaking infrastructure development, is directly reimbursed for infrastructure investment from a ring-fenced element of the municipal fiscal budget, namely the tax income from new firms established in the area.

In addition, the corporation generates income through land sales to industrial enterprises that are attracted to the industrial park. Through land sales (strictly speaking, land leasing, as the state still retains the ownership), the corporation recovers some of its investment in infrastructure. While profit-making is not a major consideration for Lingang Group, the government asks the corporation not to make a significant loss. For Lingang Group, specialised in industrial development, this is a challenging task, as industrial land value is generally low in China. Often local governments deliberately set the industrial land price at a low level in order to attract investors. The loss of income from industrial land development is usually compensated for by commercial and housing development in the area. But for Lingang, this was not possible as the Lingang Group is specialised in industrial development and required to achieve economic development targets. As one official from Lingang Group explained:

So different from many other cities, we do not donate or sell the land at so-called ‘zero land price’ to the companies... Frankly speaking, this is not because we do not want to [do business like this]. But the

<sup>5</sup> SASAC is a ministry-level agency under the State Council (cabinet). It owns the ‘state assets’ but its management is assigned into different administrative hierarchies. For example, Lingang is the asset of Shanghai municipal government and its ownership is in the hands of Shanghai SASAC. This corporatization allows the development group to operate more conveniently in the market. The management staff often come from city or district governments. As shown in the ownership, there are also other shareholders.





Map data © OpenStreetMap contributors, CC-BY-SA, opendatacommons.org

Fig. 4. Map of Land Use and Governance Sub-Divisions of Lingang.

institutional arrangement does not allow us to do so. The reason why Suzhou [Industrial Park] is able to do this is because there is only one development corporation, which can carry out both industrial and residential development. At that time, the land price for industrial use land there was cheaper, only half of ours. But it could get subsidies from residential development (Interview, Planner, Lingang Group, September 2015)

The corporation therefore ‘cross-subsidies’ the development of Lingang through property development (the ‘secondary development’) in places other than Lingang. These projects include offices, shopping malls and other more profitable industrial parks. More recently, Lingang Group has significantly expanded its scope of operation. As it has largely fulfilled its obligations to the Shanghai government for the industrial park development it is becoming an ‘ordinary’ development corporation



Fig. 5. Photograph of Lingang Heavy Equipment Manufacturing and Logistic Zone (authors' own).



Fig. 6. Photograph of Lingang Industrial Area port with wind turbines for export (authors' own).

Table 2

The ownership structure of Shanghai Lingang Group.

Shareholder	Percentage
Shanghai SASAC	51.70 %
Shanghai Tongsheng Investment (Group)	17.19 %
Shanghai Guosheng (Group)	22.51 %
Shanghai Jiushi (Group)	6.45 %
Shanghai Nanhui Construction Investment Corporation	2.15 %

Source: Shanghai Lingang Group (internal documents).

which has its own incentives and considerations. Although based in Lingang, the group has also developed other industrial parks in Shanghai, and other areas in China. In fact, because the investment in Lingang could not be recouped in the short-term, the group needs other more profitable projects to achieve a more reasonable debt ratio. In short, the development of Lingang has involved heavy investment in land, which cannot be recovered in the short-term, even for a rather successful industrial park like Lingang, and has necessitated a diversification of investments in other locations by the primary developer.

#### *The major developer for the new town: Gangcheng Group*

Lingang is to some extent a special case of urban development in China, centred around a 5 km diameter lake and garden city imaginary (see Figs. 7 and 8). Its enormous scale has necessitated the separation of industrial and urban areas, and governance fragmentation has resulted in the involvement of several state-owned enterprises. Also, Lingang is the only case of urban development in Shanghai in which the municipal government is directly involved. In other places, such as Songjiang, the municipal government has relied more on the district government to develop new towns. But because of the strategic significance of the Lingang development to Shanghai, the government directly established a municipal level corporation to invest in the industrial park. However, the development requires local support and consequently as a *political manoeuvre*, the municipal government allowed the district government to develop its own area (the urban part of the new town). In fact, this was also a tactic to turn the district government into a stakeholder in the Lingang strategy. But what seemed like a natural division of labour between municipally supported industrial development and district supported urban development turned out to be quite problematic. Partly this was spatial: the distance between the industrial park and the new town is too far to create positive synergies. In reality, the industrial park has had to rely on nearby former rural towns for residential and commercial functions. The new town has therefore developed into a mixed development with residential, and commercial and industrial (more in research and development) functions.

The Gangcheng (harbour-city) Group is also a key developer but is responsible for the development of the new town (the residential and commercial centres). Gangcheng was set up a year later than Lingang Group, in 2004, with an initial capital of 5.675 billion Yuan, fully funded by the then Nanhui district government. The actual source of the registered capital was a loan gained against the land banked by Gangcheng for urban development. This was unoccupied reclamation land which had already been financed as part of infrastructure projects by the district government, with no demolition and relocation costs. In theory,



Fig. 8. Dishui Lakeside (Authors' own photo).

then, the development was potentially quite profitable, especially since anticipated spill-over effects from the industrial park and associated infrastructure would add to the value of the reclamation land. Gangcheng could then capture the land value increase. In reality, however, the spill-over effect was very weak because of the distance between these two areas (the industrial park and the new town) and the distance from central Shanghai (75 km). In addition, the cost of infrastructure needed to bring forward this virtually under-developed area was substantial. The result is that this new town (urban) project did not go as well as the industrial park.

Similar to the Lingang Group, the early business model relied on bank loans backed by the government, which the corporation invested in infrastructure such as roads, bridges, water, and sewage. The land and infrastructure were then used as collaterals to obtain further bank loans. However, the corporation invested heavily in expensive infrastructure which could not generate short-term profit to pay off the loans. The investment projects are known as 'functional projects' because they support the development of the city through a special function (road, water, power, sewage) which do not specifically capture and generate value, in contrast to 'property development'. The development corporation thus has had to rollover its loans. According to one interviewee from Gangcheng Group, the corporation was heavily indebted with a debt ratio of more than 80 %. The situation became worse after the central government banned local government from raising bank loans



Fig. 7. Urban design of Lingang (design image).



through development corporations in 2014 (Interview, an informant from Gangcheng Group, Sept 2015). Instead, the municipal government is allowed to raise bonds directly on the market, with a quota approved by the central government. Many development corporations are rebranding themselves or regrouping through ownership restructuring to meet the requirement that they are separated from the local government in order to raise bonds from the market, or engage in more profit-oriented businesses. The corporation thus began to explore property development with commercial developers to gain the profit from land development. However, according to the development strategy of Lingang area as part of Shanghai's *future* growth area, the current scale of property development has been restrained. In addition, overall restrictions on property market development apply in Shanghai as a first-tier city subject to central government controls to prevent housing speculation and which Shanghai has implemented rather stringently. In the face of a housing boom, since 2011 Shanghai has adopted the policy to restrict housing purchases - for example, non-Shanghai families may not purchase a property unless at least one member has been working in Shanghai for more than 60 months (with social security or tax proof) and no other member of the household has a property in Shanghai. The policy did help to cool the market, but it also made property development in remote areas such as Lingang more difficult.

In response to the challenges they faced, the corporation explored various types of housing development within the constraints of this policy context. For example, Gangcheng collaborated with Vanke, the largest private real estate company in China, in a joint venture of 49–51 ownership split, to develop a 'fixed-price' housing project. The so-called fixed price housing is a type of affordable housing developed by the market but subject to price control to ensure a low profit rate. As a condition, the joint venture then was allowed to develop additionally a conventional real estate project, from which profits were made. In an effort to increase land value to enable the development corporation to recover its infrastructure investment, the new town expanded its scope and attracted five universities. *In all three of our case studies, investment in student housing has been an early component of the developments, to encourage activation and interest.* However, according to a former senior planner of Lingang this might not have been financially appropriate, as much of the land has now been given to users who cannot generate significant profits or tax income. Although these activities can yield population and hopefully stimulate the long-term development of the area, this informant felt that it would have been more viable to attract high-value added industrial enterprises to generate local taxes and to support a viable and stable residential population. In addition, the distance between the industrial park and the new town meant that the residential developments were not attractive to those who wanted to relocate to Lingang to be close to the industrial activities, and those purchasing homes in Lingang (state and enterprise employees only) were not generally choosing to live there. He explained that "Only if a function is integrated with real estate, then they can drive development" (Interview, a former senior planner of Lingang, August 2016). *As can be seen from the development of affordable housing in Lingang, some real estate development has been permitted but only when it is in support of the overall development strategy or realises some policy aims. In comparison, delivery of affordable housing was in itself a key goal of the developments in Johannesburg and London. In Lingang, housing development was only considered when necessary for supporting the main goal of industrial development, to provide for those who need to live in the area.* Such housing is not intended for former local residents who were relocated from the development site; they have been allocated separate resettlement housing in the vicinity of the industrial park (Wang and Wu, 2019).

*Other players: town development corporations and large external development corporations*

Managing relocation: Township governments

In order to facilitate demolition and relocation of original residents

in the area, Lingang Group set up a town development corporation in each of four existing towns in the planned industrial park development. The four town development corporations are called the 'urban branches' (*fenchengqu*) corporations, which are joint ventures between Lingang Group and township governments. Specifically, Lingang Group provided capital, while township governments contributed their land. This is also a tactic to incentivise these four township governments and turned them into stakeholders in the development of Lingang, to gain their support and assistance with the process of demolition and relocation of existing residents. The costs of demolition and relocation were covered by these urban-branch corporations which acquired bank loans based on the land allocated to develop new apartments and public facilities for former farmers who had been relocated outside the industrial area. The original residents received new apartments and a lump sum in compensation with which they could purchase additional properties at below market price. Because farmers' housing and land is generally large, the compensation led to each resident owning several properties, which are rented out to industrial workers in the region for rental income. In each town, a small industrial park has been established and the taxes generated from these industrial parks are then used to pay back the debts for developing relocation housing. At this small scale, the inter-dependence and spill-over mechanism seems to work because of proximity between industrial park and residential areas.

#### *'Marching to Lingang'*

Because Lingang is a large-scale development, its progress has been slow. In order to speed up its development, the municipal government decided to require four large development corporations which had been active in developing Pudong new area<sup>6</sup> to join forces to support the Lingang development. As a slogan displayed in various places in Lingang suggests, the municipal government required these development corporations to support the development effort: *'marching to Lingang to have the final battle'*. It was hoped that these four development corporations would bring their successful experience of development as well as resources from their investment in the region. They have different orientations based on their major sectors of business in Pudong. Lujiazui Group was established in 1990 to develop Lujiazui Finance and Trade Zone as Shanghai's new CBD in Pudong. The company is really the pioneer of China's land-based finance model. Before a formal land market was established in China, this relied on a 'virtual capital circulation' model (see Wu, 2002, p. 1087), also known as 'capital virtual circulation, physical land turn-over' (*zijin kongzhuān, tǔdì shízhuan*) in which the land, rather than fiscal investment, was used as an initial input from local government. Development corporations received the land which was used to generate finance directly through land leasing and through bank loans, with no further cost to the municipality (Xie & Huang, 1995, p. 225). Thus land was used as collateral even before it became an asset (because of the government guarantee). This approach in essence used un-developed land to secure bank loans even before the land was titled. This brings considerable financial risk. Because of concerns over rising local government debt, the local government must now use fiscal income to develop the land into an asset before it can use the development corporation to gain a mortgage against the land (Wu, 2019). The debts of development corporations are then classified as company debts, while the municipal government is allowed to issue municipal bonds to open up a new source of financing.

By the time of the Lingang operation, China's land market was more developed. The Lujiazui Group simply raised capital from its subsidiaries for its Lingang project. According to the interviewees from Lujiazui Group, they did not need to borrow further since the business model

<sup>6</sup> These four corporations are Lujiazui, Zhangjiang, Jinqiao, and Waigaoqiao. Here we will particularly discuss the branches of Lujiazui and Zhangjiang in Lingang.

over the past ten years had been very successful (Interview, Lujiuzui Lingang Project, August 2016) and they were able to access three sources of capital. First, a listed company under Lujiuzui Group, now specialised in financial investment and asset management, was able to package assets of the group and raise funding from the capital market. Second, the corporation had shifted from land development and leasing to property and asset management, which contributed an annual rental income of 3 billion Yuan. This business has been useful to increase its credit rating and get bank loans when necessary. Third, the company also invested in some quick turnover residential projects. In Lingang, with the money from the listed company, the Lingang branch developed a conference centre, a hotel, and a residential project. Although the company was not optimistic about the business of the conference centre and the hotel because Lingang is too far away from central Shanghai, in contrast to the more centrally located national exhibition centre at Hongqiao (Jiang & Waley, 2018), it has already managed to recoup the investment from selling villas in the residential project.

Another major external corporation is Zhangjiang Group. In contrast to the urban projects developed by Lujiuzui, Zhangjiang Group has good experience of industrial development: it was responsible for developing Zhangjiang High-tech Park and is specialised in R&D investment (Zhang & Wu, 2012). Using the assets in Zhangjiang, it raised initial capital from the bank and established a project company in Lingang. It abandoned its earlier approach of selling the developed land and now wants to hold both industrial and commercial properties for long-term return. The development of industrial and commercial business is regarded as interconnected:

We decided to manage the industrial zone in Lingang ourselves, because we have three pieces of commercial use land. The vacancy rate of the commercial properties in the main town of Lingang is already quite high. If we simply sold off our industrial land to the companies, it would be difficult to unleash the potential of the commercial use land...similarly, commerce is far from mature in the area. If we sell off the three pieces of commercial land then the whole development would become a deadlock (Planner 1, Zhangjiang Lingang Investment and Development Corporation, August 2016)

Therefore Zhangjiang started with developing an industrial park in the new town. It believed that only population and industries could bring about long-term growth and so planned to make full use of the commercial development only after industries had promoted the growth of population in the area. Once there are people and industries, a planner from this group reflected, there will be a lot of business opportunities:

For our project in Lingang, improving the physical environment of the development is not about then capturing the rising land value or increasing the rent of properties...For instance, why are mobile phones so cheap these days but they still manage to earn money? Selling the phone is not profitable but you can earn money from all kinds of after-sales services. Our logic is the same. We hope to make a long-term profit from this development at a later stage... As long as there are enough people, just stored value smart card business can raise a lot of money (Planner 2, Zhangjiang Lingang Investment and Development Corporation, August 2016)

Both the town development corporations and the large external development corporations mandated to operate in Lingang are also closely associated with the 'strategic' and long-term operation of the development. This partially reflects the fact that in Lingang the overall intervention from the government is strong. Cross-subsidies from earlier development and borrowing monies based on business activities in other places to facilitate a development are common practice across Chinese state-owned development corporations. Thus, in the Lingang case leveraging in additional investment to stimulate a long-term development project has been achieved not through fiscal redistribution but

rather through a more market-based operation using development corporations' accumulated reserves and capacities to raise investment from the capital market through what is now a more market-based trans-local financing operation (Wu, 2019).

## 2.5. Beyond the Asian 'real estate turn': Assessment

In sum, differently from the 'real estate turn' identified by Shatkin (2017) in mega projects in Asian cities, the business model of Lingang is designed to promote long-term population and economic growth and operates by generating a return to the municipal investment through expansion of economic activities and related taxation income streams. Instead of seeking to maximise a rapid return on their investment through residential property development, land sales and leasing, the development of Lingang prioritized the promotion of industries and attracting a resident population for both political and economic reasons. As we can see more generally from transit-oriented new town development in Shanghai, municipal and district-government have financed infrastructures through development corporations which have played a pivotal role in 'paving the way to growth' (Shen and Wu, 2019). In political terms, the state-owned development corporations in Lingang were allocated tasks of enabling economic growth rather than that of making a profit or generating land income *per se* - although land income (through industrial land leasing and local residential, tourist or commercial development) has remained crucial to enabling the development in Lingang as in other Chinese cities. In economic terms, though, recognising that land leasing to private sector developers is not a sustainable business but generates only a one-time income and potentially leaves land undeveloped, state-owned development corporations have largely kept the development to themselves in an effort to promote dynamic and sustainable urban development with synergies between industrial, residential and commercial uses. A strong policy against speculative private investors has therefore seen state-owned development corporations operating not only as primary developers (for infrastructure and land development) but also assuming the role of secondary developers. In addition, after the local government was banned from guaranteeing corporate debts in 2014, the development corporations have managed through ownership restructuring to find new sources of capital for more business-oriented projects, in conjunction with delivering their infrastructure projects. This has included bringing forward developments in the property market in Lingang and elsewhere to make a profit for themselves rather than passing these on to real estate and private sector developers. *In all our cases, managing the distribution of the returns to development has been relevant to the politics of the development. In the London case, for example, we document the intense conflicts between private sector property developers and state actors in terms of paying for and recovering the costs of infrastructure development.*

The business model of Lingang required a large sum of investment at an early stage, with a slow economic return dependent on modest land sales and general taxation. To sustain this long term business model, the state-owned corporations have in the meantime used other non-local businesses to support their investment in Lingang. The key industrial developer, Lingang, was created on the basis of its predecessor corporation in Caohejin in inner Shanghai, inheriting its assets. In the case of the Pudong Development Corporations this entailed raising funds based on their earlier projects; in the case of the Lingang based corporations, this has meant initiating new profitable property developments outside of the development area.

The development of Lingang therefore goes beyond a locally based approach (effectively meaning district government-initiated urban sprawl) confined to realizing the land value of the development as such, but transcends multiple scales both institutionally and financially. This has included initial contributions of metropolitan and district land for development, the ringfencing of locally generated municipal taxation streams, the potential to realise land value from both judicious local property developments synchronised with urban functions (industry,



tourism, commerce and education) to ensure population growth and, more recently, the use of profits from extra-local developments, either from earlier successes or new initiatives, to cover the substantial costs of Lingang's infrastructure investments. Capital flows through the operation of various development corporations and their branches across different scales, and, together with the redirection of a key municipal-scale income stream (taxation of enterprises) to the Lingang management committee to fund urban projects there on an ongoing basis, have therefore enabled materialization of industrial development at the edge of the municipal region.

To what extent is this business model unusual in the Chinese case? Because Lingang is a municipal strategic project, within a large and wealthy municipality, it can operate through state-orchestrated land development. In many smaller projects, real estate development or a more common "land-business" model still operates. Large-scale mega urban developments, to achieve long-term strategic goals, are risky and might not always be successful. Because of the slow return on investment, projects in "wrong" locations often lead to financial difficulties, as shown in high levels of local government debts (Wu, 2018). But large, strategic developments do often come closer to the Lingang business model. For example, the development of Tongzhou new town represents a response to the central government mandate to control the overall size of Beijing. Tongzhou thus is being developed as the 'subcentre' of the Beijing metropolitan area. In 2018, the municipal government of Beijing was relocated into this new town to support its development. At a larger scale, Xiong'an in Hebei province is being built as a national strategic project, following the model of Shanghai Pudong, to form part of the Beijing city-region. In Xiong'an, the land-centred development model has been totally abandoned. It is not clear what kind of new finance approach will be deployed there to fund infrastructure development, but there are some similarities to the Lingang case, as the new city is at a distance to central Beijing and complex geographical conditions such as many lakes might lead to expensive infrastructure projects.

In short, Lingang is perhaps not such an exceptional model. It reflects some persistent features of state strategies, to prioritise broader strategic goals, albeit using 'market instruments' including a range of financial operations (Wu, 2018). The description of China's land-centred urbanisation is perhaps overwhelmingly narrated with reference to the 'land finance' or 'land business' model. After a period of real estate boom in Chinese cities, the case of Lingang reveals the underlying motivations of government 'business' and the politics of development that have always been there in China but which are becoming more salient along with China's entrance into slow growth. Lingang is a state-driven project; its development resorted to various governance innovations (the Lingang management committee co-ordinating a range of levels of government and a variety of state actors rather than a comprehensive local government approach) and market approaches (for example, financing through development corporations). But its business model is not that of urban entrepreneurialism or financialization. Instead, it reveals some salient feature of 'state entrepreneurialism', or, that the state acts through the market (Wu, 2018, 2020).

*These distinctive features of the Lingang business model throw the experiences of Johannesburg and London into relief, as we will explore in the following two chapters. The Johannesburg case reiterates the importance of co-ordinating the agency of different state actors and institutions in large-scale urban developments, and confirms the possibility for long term strategic goals rather than short term property-led returns to drive developments where municipal-wide financial resources are available. In contrast with Lingang, though, state capacity and resources in Johannesburg are limited and the decision to keep the development in-house, as part of municipal institutions rather than development corporations reveals the impacts on long-term projects of political volatility. The broader political and governmental context in Johannesburg forms an important backdrop to the large-scale development case study there, so the following section begins by outlining that.*

### 3. Integrating the city: Institutional co-ordination and city-wide property taxes in Johannesburg

"One of the big tension points between ourselves and the politicians is, they are saying, this thing is taking too long. Why don't we see it as a mega project, take city blocks, package that into an investment offering, go to China if that's what it takes to raise the capital and the interest so that you can get these things done at scale. We've been saying that is not sustainable. What you need is to enable the evolution of these places at their own pace so to speak. And that a wholesale displacement of 30 property owners by one is not what we are trying to do even if you have participation in that investment vehicle. That's not a sustainable way of developing the city. In fact in one of the meetings we were told that we are committed to apartheid city form and that's why we are not driving this thing, and then there was *snot en trane* [meaning: emotional drama]." (Interview, State 6, 16 August 2016)

#### 3.1. Johannesburg's fractious post-apartheid developmentalism

Aside from the obvious "post-apartheid" labelling (e.g. Tomlinson et al., 2003), Johannesburg has been referred to variously as a "neo-apartheid city" (Beavon, 2004); a "city of extremes" (Murray, 2011); "Fortress Johannesburg" (Lipman & Harris, 1999); and, a "neoliberal dystopia" (Bond, 2000). These are labels that point to either the continuance of past socio-spatial patterns, albeit in modified forms, or to new market-driven processes creating division and inequality.

There is, however, other labelling which is less categorical and which points to degrees of ambiguity, complexity and crossover. There are references to Johannesburg as "the pirate town" (Simone, 2006); "the elusive metropolis" (Mbembe and Nuttall, 2008); the "edgy city" (Kruger, 2013); and the "mutant city" (Wright, 2018). The mutant, for example, speaks to a "messy incompleteness" and a "discontinuous transformation" which brings together the reality of change with the unpredictable and fractiousness nature of this change (Wright, 2018, p. 418).

Clearly there are different tropes in the literature on contemporary Johannesburg with each pointing to some aspect of a diverse reality. There are, for example, certainly extremes in Johannesburg but there is also a lot in-between. Johannesburg has the privatized enclaves; precarious informal settlements; sprawling low-density car-dominated suburbs; and, the still racially segregated townships; but it also has many transformed spaces. These include: its gritty but vibrant inner city; previously white working-class suburbs which now offer a gateway for African immigrant communities; new racially mixed suburban nodes and edge city developments; and, townships such as Soweto which have experienced a visible makeover with upgraded infrastructure, new housing and green spaces.

The governance of Johannesburg also defies easy categorisation. Johannesburg has been governed by a single-tier metropolitan authority since 2000 which has had to manage multiple imperatives. It has had to maintain financial stability, requiring it to give attention to the mainly white - but, increasingly also, black - middle-class taxpayers, while also fulfilling its constitutionally derived developmental mandate, and securing its electoral base, by providing for the mainly black urban working-class and urban poor. Bond (2000) refers to "the rulers' neoliberal mindset" but Freund reminds us that "the state has certainly devoted large amounts of time and effort to attacking the problem of the cities" (Freund, 2010, p.284)

Freund writes of Durban referring to the deracialisation and rationalisation of local government, the extension of services into informal settlements and townships, the provision of affordable housing, and more. The same clearly applies to Johannesburg where there has been a major re-orientation of the city's budget towards areas of previous exclusion and marginality. Parnell and Robinson (2006) wrote of how

the development strategies of the then metropolitan government sought to reconcile the need for economic growth with programmes to address poverty and inequality. Each of the Johannesburg's post-apartheid mayors have attempted major developmental initiatives. The first two mayors were from the African National Congress (ANC), the 'party of liberation'. Mayor Amos Masondo who was in office between 2000 and 2011 focused on the regeneration of the inner city and on improving conditions in the townships of Soweto and Alexandra. His successor, Parks Tau, who held office between 2011 and 2016 launched the ambitious Corridors of Freedom, and also Jozi@Work which involved community partnerships in the delivery of services. The ANC lost the 2016 municipal election to a coalition led by the centre-right Democratic Alliance (DA). Mayor Mashaba's dominant agenda was property-led regeneration of the inner city, but he formed a curious *de facto* alliance with the populist left-wing Economic Freedom Fighters (EFF) and introduced developmental policies including the requirement that all new property developments include a proportion of inclusionary (low-income) housing.

The developmentalist agendas and actions of the metropolitan government belie attempts to typecast post-apartheid government as neoliberal or even anti-poor (Bond, 2012). However, the developmentalist agenda is clearly fractious and constrained by: the continued influence of suburban white taxpayers; the power of large real estate developers with their enduring preference for investing in the wealthy northern segments of the city; and degrees of institutional deterioration in the context of the Zuma presidency nationally, and political factionalism and volatility locally. Some of the initiatives have also produced outcomes which are hardly developmental, such as evictions and other forms of displacement in the inner city. It is these constraints and consequences which partly explain "the halting manner of Johannesburg's transition" (Wright, 2018, p.421).

A further point of complexity is South Africa's constitutional arrangement. South Africa is neither a federal nor a unitary state. Each of its three spheres of government (national, provincial and municipal) have constitutionally protected original powers and interact (or fail to interact) within the framing of system of 'co-operative governance'. The metropolitan authority administers a population of over 5 million people, and is responsible for: providing basic services, spatial planning and land-use management, local policing, and aspects of transport and housing. It falls within Gauteng Province which has two other metropolitan authorities. The main spending functions of provincial government are health and education, but it also deals with environmental management, and aspects of transport, housing and spatial planning, with contests between provincial and metropolitan authorities over functional boundaries. Provincial government has attempted to position itself as the coordinating authority across a "city-region" of around 15 million people but it has met various forms of resistance from metropolitan governments. In addition, there are national government agencies dealing with matters critical to metropolitan development including commuter transport, electricity generation, and water security, and there are deep concerns around the performance of some of these agencies. Certainly, the question of what local government is in the South African context cannot be easily answered and referring to government in the singular is misleading. Nevertheless, in post-apartheid South Africa, the public legitimacy of any agent of government still largely rests on the extent to which they can effect transformations in the inherited apartheid-era socio-spatial and economic urban patterning. In Johannesburg, the Corridors of Freedom project has been a crucial element in this transformation agenda, even as it demonstrates well, as we also saw in Lingang, the complexity of mobilizing the institutional capacity, financial resources and political buy-in needed for bringing forward such a large-scale urban development.

### 3.2. Transit-oriented development as post-apartheid spatial strategy

The Corridors of Freedom ('Corridors') was announced as a flagship

initiative of the Metropolitan City of Johannesburg in 2013 by Executive Mayor, Mpho Parks Tau. The language of the announcement was audacious:

"Today we are taking transit-oriented development another step forward, with the introduction of a project that will forever change the urban structure of Johannesburg and eradicate the legacy of Apartheid spatial planning" (City of Johannesburg, 2013, p.5–6).

The Corridors drew on concepts of Transit-Oriented Development (TOD), seeking to stimulate urban development along new public transport corridors, but was, fundamentally, a response to local political imperatives. Mayor Tau, elected to office in 2011 and representing the 'party of liberation', the African National Congress (ANC), was under pressure to show how his administration would contribute to the radical transformation of a high unequal and divided city. He responded with two new large-scale initiatives. First, *Jozi@Work*, which involved the opening up of sub-contracting of city services such as waste collection, greening services and road maintenance to community-based co-operatives. Secondly, there was the *Corridors of Freedom* which was a spatial intervention to intensify development along new Bus Rapid Transit (BRT) networks. It involved "stitching together" a fragmented city into something far more integrated and inclusive through linking centrally located affordable accommodation to public transportation, employment opportunities and a range of accessible services.

The Corridors project reflects the path dependent concerns of post-apartheid governance, but they are not, of course, unusual in the global context with many municipal governments deploying forms of TOD motivated by concerns for sustainability and social inclusion (see, for example, Renne & Appleyard, 2019; Shen & Wu, 2019). Furthermore, the Corridors were in fact not a "new" idea. The concept drew on ideas circulating internationally but also developed as part of a long-standing South African conception of how corridor-based development could be used to remake the apartheid city which had been propagated since the 1980s (Harrison, Rubin, Appelbaum, & Dittgen, 2019). In fact, since the single-tier metropolitan authority of Johannesburg was established in 2000, evolving spatial policy had been built around the densification, compaction and integration of a spatially dispersed and overall low-density urban agglomeration. The announcement in May 2004 that Johannesburg would host the 2010 FIFA World Cup was a catalyst for finally implementing corridor-type development supported by a significant investment in transport infrastructure (Wood, 2014). Work commenced on a BRT system and spatial planners soon saw the opportunity for using this new infrastructure as the backbone for significant urban spatial restructuring. By 2006, TOD-type plans had already been prepared for intensified development along the Phase I BRT routes. However, ideas of transformative TOD were championed mainly in the technical domain by the city's Department of Development Planning, and progress was gradual, especially with the contraction of the real estate market from around 2008 (interview with senior official, 2 August 2016).

What changed in 2013 was that TOD was actively championed by the highest political office in the city, with the technical construct now aligned to a politically evocative term, *Corridors of Freedom*. Although TOD is often linked to synergized public and private interests (Guthrie & Fan, 2016), there were no large real estate developers waiting in the wings for the Corridors, and the City of Johannesburg had to work hard to entice developers away from their traditional spatial preferences to invest in the Corridors (Todes & Robinson, 2019). The Corridors initiative was the consequence of a political move by an ambitious mayor who was concerned to show that his new administration could deliver practically on a national agenda for socio-spatial transformation (Harrison et al., 2019). The Corridors was an ambitious initiative, embedded in a long-term perspective for the city, with densification expected to unfold progressively over fifteen to twenty years, rather than through a quickly implemented mega project (interview 2 August

2016). While there was an element of ‘patient politics’ involved in the initiative, with the ANC at the time expecting to be in power for many years yet, there was also a concern with quick returns to secure electoral gains.

Although the political formulation of the project soon gained recognition and popularity (including in international policy circles), the exact scale of the longer term ambition was only sketched out vaguely with reference to a number of potential transport corridors connecting former black townships such as Soweto, Alexandra, Diepsloot and Ivory Park to the CBD and other mixed use nodes in the north of the city (City of Johannesburg, 2015). But it was clear that for the first four to six years the attention would be on four areas – the *Louis Botha Corridor* linking the CBD to the dense, low-income Alexandra township in the east (and then onwards to the financial hub of Sandton); *Empire-Perth*, a corridor linking the CBD and Soweto but passing through zones of middle- and working-class residence and the educational precinct with the city’s two largest universities; and, *Turffontein*, a historically-white working class district in the south of the city which had transformed demographically to an area of mainly black residence. To satisfy a key political constituency, the segment of the Empire-Perth Corridor through the township of Soweto was later defined as a separate Corridor (See Figs. 9–11)

Even so, the development of these three areas was ambitious for a medium-term horizon, and the question arises as to how an only moderately resourced city in a middle-income and highly unequal country could deliver on the ambitions. In other words, what was the ‘business model’ for the Corridors?

### 3.3. Resourcing the compact city

The Corridors are, of course, not a classic mega project on a distinct piece of land – they are composed of long strips of already developed parts of the city, with a great diversity of activities and characteristics, complex land ownership structures, and a wide range of relative locational advantages and disadvantages. *While the London case shares a complex landownership structure with similar implications for the ability to control the time-scale of development, the landowners there are much larger, and 75 % of the land is in some form of public ownership.* Additionally, the dispersed nature of the Johannesburg site, stretching along several major arteries in the city, means that the development cannot be planned, resourced, implemented and managed in the same way as land development around a dedicated piece of new infrastructure in green-field or brownfield areas. There was, instead, an upfront recognition that corridor-type development would happen incrementally over an extended period, involving multiple actors, although the city government would need to play a critical catalyzing role through the process, but especially at the beginning.

Indeed, the huge investment in the construction of the BRT itself was intended as the key catalyzing action. But there were complications with this as, in general, bus transport has a small modal share of trips in Johannesburg and, even where the BRT has been implemented, this has attracted an only modest additional ridership. Around 85 percent of public transport trips in Johannesburg are in minibus taxis, which are a form of (non-subsidized) privately-owned paratransit extending over one thousand routes (Wray & Gotz, 2014). Even where the BRT has been in operation since its inception in 2010, its modal share of trips on public transit is less than 20 percent (Kollamparambil, 2016)<sup>7</sup>. The minibus is arguably far better aligned to the spatial complexity of Johannesburg, and its wider city-region, which has largely evolved with automobile use

in mind, than the fixed trunk lines of the heavily subsidized BRT system (although the further development of feeder routes may assist with system viability).

While the currently modest ridership of the BRT may be only a very low-key attractor for TOD-type development, the city administration hoped to strengthen the attraction for real estate investments through direct expenditure on infrastructure along the Corridors and through offering a variety of incentives for developers (Todes & Robinson, 2019). The politics of this were complicated, however, as city government was only committed to *maintaining* levels of infrastructure across Johannesburg; investment in *additional* bulk capacity was reserved for areas of historical neglect (that is, mainly low-income former African areas including townships such as Soweto, or peripheral informal or new low-income settlements such as Orange Farm and Diepsloot) and the strategically important TOD Corridors. In other parts of the city, including middle and higher income neighbourhoods close to the corridors, upgraded infrastructural capacity in support of new development would have to come largely from contributions by the private developers themselves (City of Johannesburg, 2016)

In the wake of the expensive investments required to support the delivery of the 2010 FIFA World Cup, Johannesburg’s adjusted capital budget was at a near historical low of R3.749 billion (around USD 262 million)<sup>8</sup> in 2011/12 which was inadequate even for basic infrastructural maintenance. This budget included R859.7 million received by the City from the National Treasury as special grant funding for the construction of the BRT (City of Johannesburg, 2011). However, Mayor Tau managed to triple the capital budget to R10.1 billion (USD 820 million) by 2014/15, indicating an intention to spend R100 billion (USD 8.2 billion) on capital projects over a 10-year period. In his 2015/16 Budget Speech, the political head of finance in the city, Geoffrey Makhubo (City of Johannesburg, 2015), indicated that the Corridors were to be prioritized in this capital spending. The expenditure was planned to be focused on upgrading power supplies as well as water and sewer lines, but budgets were also allocated to improving the amenity of residential environments around the corridors through the development of public parks, bicycle lanes, public art, and so forth (City of Johannesburg, 2015)

The city planners realised however that even this scale of capital expenditure would be insufficient to induce developers away from prioritising their investments in profitable peripheral locations on the edges of Johannesburg’s wealthy northern suburbs, and around the rapid rail (‘Gautrain’) stations of Rosebank and Sandton, with fast links to the airport and the nearby municipality of Tshwane (Pretoria), which are proving very attractive to TOD-type development. The long-term path dependency of private sector developers on suburban land holdings and well-established lines of financing and development models left more risky and low value inner-city development looking unattractive (Todes & Robinson, 2019). In addition, longstanding opposition from middle and higher income (formerly white) residents living close to the corridors to the intensification of land use through low-income housing development near to their neighbourhoods meant that investment in these areas attracted further risks (Appelbaum, 2017). The city officials therefore contracted planning experts to model the financial envelope for delivering low-income housing in these areas, and introduced a series of incentives for developers including, most importantly, accelerated development approval processes including pre-approval if using the modelled developments (thus disabling local protestors). They also

<sup>7</sup> In the case of Westbury, a working class neighbourhood on the Empire-Perth Corridor, only 10.3 percent of motorized trips in 2016 were in private vehicles. Of the 89.7 percent on public transport, 17.5 percent was on BRT with 58.7 percent in minibus taxis, with the rest distributed between rail, conventional buses and metered taxis.

<sup>8</sup> The Rand-Dollar exchange rate is highly variable. For the purpose of this paper, we have used an exchange of 12.2 South African Rand to a US Dollar, which represents the average for the period 2013 to 2017.



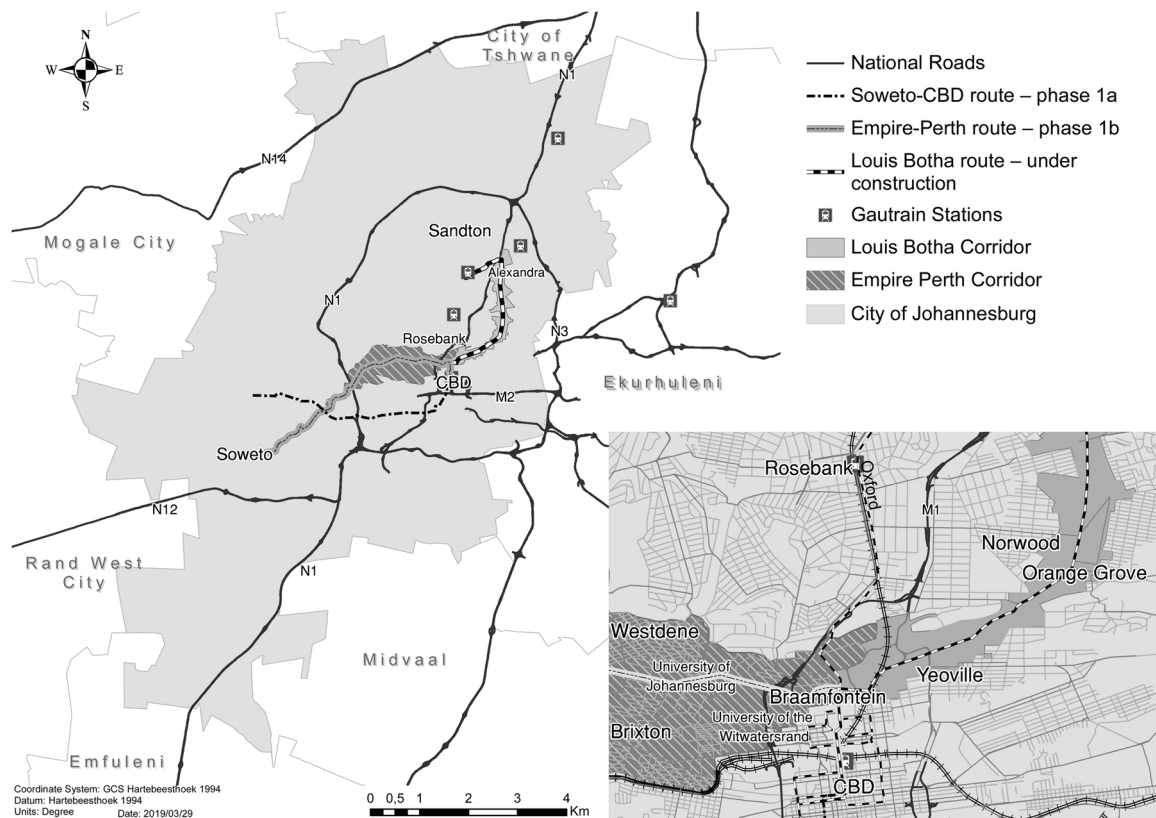


Fig. 9. Map showing “Corridors of Freedom”: Planned Phasing and Intensification Areas.

adopted a more permissive approach to development rights on properties, and property tax rebates<sup>9</sup> (Harrison, 2016). In addition, to encourage the developers to come forward, the Mayor instructed the city-owned Johannesburg Property Company (JPC) to purchase sites along the Corridors as they became available, which would then be consolidated and made available to developers through either outright sale or through partnership agreements with the city. Over 100 individual properties were in fact purchased on the open market (interviews with senior officials 16 and 22 March 2018). *This desire to be able to control the direction of the development by consolidating land ownership and acquiring public interest in the land (and perhaps increasing direct benefit from the development to the state) is also evident in London, where compulsory purchase orders have been under consideration.*

In implementing the Corridors development, then, the city administration has had access to a range of instruments and capacities including direct financing of bulk infrastructure investments, providing incentives to induce development, and engaging in some land banking.

<sup>9</sup> A key mechanism for accelerating approval is to offer developers sites with all zoning and other development rights pre-approved. In this process, the city takes upon itself the responsibility for costly and time-consuming processes such as preparing environmental impact, traffic, bulk infrastructure, and heritage assessments. Within the Corridors, the city promotes densification through a permissive approach to controls on additional dwelling units on properties, consolidation and subdivision of properties, and responding to post facto requests for additional rights. Finally, the city's rates policy has been adjusted so that landowners only pay 25 percent of property taxes during the construction phase and 50 percent during the first year after construction (for a detailed account of incentive see Harrison, 2016)

The programme was nevertheless highly ambitious in relation to Johannesburg's limited bureaucratic and fiscal capacities, and so finding a 'business model' which could enable implementation was of critical importance, and a significant challenge. The two critical elements of the model are, putting in place the *organizational arrangements* to enable implementation; and establishing effective *funding mechanisms*. Ultimately this relied on a small group of experienced, committed and agile bureaucrats who worked incredibly hard to co-ordinate political support and create administrative and technical systems which enabled the project to go ahead.

### 3.4. Co-ordinating institutional priorities

*Unlike London and Shanghai, Johannesburg is a single-tier metropolitan authority<sup>10</sup>. The City of Johannesburg Metropolitan Municipality does not share local government powers across its territory in the way the GLA does with the London boroughs or the Shanghai Municipal People's Government does with its districts and lower level (township) administrations. This meant that the planning and implementation of the Corridors programme did not require the establishment of an interjurisdictional authority such as a*

<sup>10</sup> The single-tier metropolitan authority was constituted at the end of 2000, following a period of local government transition with the ending of apartheid. Metropolitan authorities were constituted in a way that would allow meaningful redistribution of resources from historically privileged white areas to historically deprived black areas. However, Johannesburg is also one of three similarly sized major municipalities in the Gauteng province (with Tshwane, and Ekurhuleni), which together constitute a largely contiguous wider city-region of approximately 14 million inhabitants.





Fig. 10. BRT Lanes (Photo, Mark Lewis).

development corporation.

However, the not insignificant institutional challenge was how to align the various departments and agencies *within* the metropolitan municipality to the task of Corridor development. It helped of course that the Corridors of Freedom was a mayoral priority, in a municipal government with powers relatively centralised around the Mayor and his executive committee. This gave the programme considerable sway within the planning, prioritisation and budgeting processes of the City. But, there was still a need for some form of operational integration. Initially, an inter-departmental committee was established for this purpose but it was not sustained (interview with senior official, 28 July 2016). Instead, the effective integrating mechanism became the influence that the Department of Development Planning had in shaping the capital budget of the City. The department hosted the Capital Investment Management System (CIMS) of the city and all departments and agencies had to apply for project funding through the CIMS, allowing the planners to co-ordinate and align investments with the city's spatial plans and strategic programmes, of which the Corridors was seen as the most important (interview with senior official, 29 July 2016).

Once capital expenditure was approved through this process, the individual municipal departments and agencies mainly implemented their own projects as agreed (for example, sewer, water, power and road upgrades). However, in some cases such as the development of a neighbourhood centre or of a mixed use precinct, fine-grained integration is required. Here, the city made use of the Johannesburg Development Agency (JDA), a wholly city-owned company, which was established in 2001 and tasked with leveraging private sector development into deprived or declining areas through catalytic state investments (Harrison, 2016)<sup>11</sup>. The JDA was also responsible for the implementation of the BRT, allowing for operational coordination between the construction of the transit network and the adjacent public investments which they were driving. Within this broad mandate, however, the JDA's activities went further than overseeing integrated area-based implementation of public sector projects: using its history of engagement with private real estate developers across the city they also sought to directly encourage and negotiate private investments into the Corridors. Institutional relationships within the City varied. There were, for example, fairly strong linkages between the Department of Development Planning and the JDA, with these entities reporting through to a single political portfolio head. But there were also varying degrees of tension with other agencies such as the Johannesburg Property



Fig. 11. BRT Station (Photo, authors' own).

Company (JPC) whose objective of maximising revenue through the City's property portfolio sat uneasily with instructions to purchase land for affordable housing, for example.

However, while institutional integration is less complex at the sub-municipal level in Johannesburg than in London and Shanghai, the *inter-governmental* dimension is arguably more complex. In China, there is unitary government with a strong political and bureaucratic hierarchy; in England strategic planning competencies (if not appropriate levels of financing) are devolved to the GLA. The complexity of the inter-governmental arrangements in South Africa has impacted on the Corridors project. While the metropolitan authority, with the support of key departments of national government, has pursued a programme of urban compaction and consolidation around TOD, the Gauteng Provincial Government has had contrary spatial objectives, focused on new city development beyond the urban edge (the so-called 'mega human settlements') (Ballard, Dittgen, Harrison, & Todes, 2017). The divergence in spatial policy between metropolitan and provincial government gradually narrowed as bureaucrats from both spheres sought ways to reconcile the contending spatial visions of their political chiefs, but the lack of coherence across government has, arguably, diminished energies and resources for implementation.

*In summary, unlike in London and Shanghai, the City of Johannesburg did not create a new institutional structure for the planning and implementation of Corridors, relying instead on an existing department to provide the coordinating function, although with strategic use of existing city-owned companies (the JDA and JPC) for community facilitation and specialist property functions. It relied also on the political authority of the Mayor in mobilizing the attention and commitment of departments and other agencies across the bureaucracy. While this approach avoided the time and cost of creating something new, it had downsides including the lack of focused attention on the Corridors by officials who, although committed to the programme, had multiple other responsibilities. It also exacerbated the impacts of electoral and political cycles on a long-term development. The London case had some parallel experiences with the impacts of changing Mayoralties, and also brings forward insight into how more*

<sup>11</sup> The JDA had focussed initially on the inner city which had undergone massive transformations since the late apartheid period but, over time, had been allocated responsibility for other area-based initiatives including the development of Alexandra township and of strategic nodes in Soweto.

or less institutional autonomy for development corporations might impact the progress of a development. In the discussion below we show that in Johannesburg there also an integrated approach to mobilizing fiscal resources, with reliance mainly on well-established sources of funding, although some special arrangements were made to secure additional, exceptional resources.

### 3.5. Transfers, loans and property taxes: Keeping land value low

Having achieved a measure of institutional co-ordination across the municipal government to support implementation of the Corridors development, the second key element of the 'model' concerns the financing arrangements. The arrangements put in place flow directly from the wider national framework for local government financing.

On the one hand, there is a direct flow of income from the central government to local authorities in South Africa. All personal income and business taxes are paid into the National Treasury which then disburses the income across the three spheres of government (national, provincial and local), with a division of revenue across provincial and local governments allocated in terms of an 'equitable share' formula which is an unconditional inter-governmental fund transfer. In addition, National Treasury administers various conditional fund transfers allocated for specific programmes such as housing, electrification and, recently, 'integrated urban development'. The projected percentage share of the national fiscus in the period 2012/13–2018/19 is 47.4 percent to national departments, 43.3 percent to provincial governments (mainly for education and health) and only 9.3 percent to local government (South African National Treasury, 2016).

However, and significantly for the financing of the Corridors project, while provincial governments are entirely dependent on national government for their revenue, local governments have their own long-established (for over a century) funding sources including, most importantly, service charges (electricity, water and sewerage) and property taxation. The City of Johannesburg is in fact substantively autonomous of national government for its revenue earning although, given the scale of national level investment in specific programmes, this is less so when looking specifically at the capital budget. In South Africa, Johannesburg is the city least dependent on national government. In 2013/14, the City of Johannesburg raised 84.1 percent of its overall revenue internally, with 9 percent coming through direct grants from national government and 6.9 percent from the equitable share (South African Cities Network, 2016)<sup>12</sup>.

To use the 2018/19 financial year as an example, the City of Johannesburg has budgeted R51.9 billion for operational expenditure and R7.8 billion for capital expenditure (down from R9.9 billion in the previous year). The two critical elements sustaining the operational budget are profits on the trading of services (of which water and electricity are the most important) and property taxes. The property tax regime allows a municipality to levy on property owners a monthly tax on the value of land and its improvements<sup>13</sup>. This provides an important element of fiscal sustainability to municipalities such as Johannesburg with a strong property base and significant investment in property development, and is a dynamic form of fiscal urban value capture, as tax revenue increases with a rise in the value of land. Thus local government revenues benefit from generalized improvements in the urban environment, and significant potential public benefit accrues from areas of rapid growth and from high value business and high-income residential developments. The property tax regime in Johannesburg does however differ from mechanisms that are now commonly referred to as 'land

value capture', such as the auctioned land use rights in Sao Paulo, Brazil, as the income derived goes mainly into the operational budget of the City rather than being ring-fenced for urban infrastructure or affordable housing (Halbert, Attuyer, & Sanfelici, 2016).

While the overall fiscal regime is an important foundation for sustaining and justifying investment in special programmes such as the Corridors in the long term (as it has the potential to yield an ongoing return in increased property taxation), it is the capital budget of the City which is of immediate significance for financing the investment needed to enable the development. Of the R7.8 billion overall capital budget for the city for 2018/19, R1.88 billion comes from 'surplus cash' in the operational budget, R2.85 billion from loan funding, and R3.1 billion from grants and contributions from national government (City of Johannesburg, 2018). To release surplus cash from an overstretched operational budget is a challenge<sup>14</sup> but Mayor Tau was able to fund increased expenditure for the Corridors through measures such as cutting back in the period 2013–2016 on the appointment of staff to vacant positions.

In addition to carefully managing current revenue streams, which are relatively modest, municipal borrowing has become increasingly important for funding large capital expenditures. There are of course the traditional forms of borrowing from financial institutions but Johannesburg has been an innovator nationally with the issuing of South Africa's first ever municipal bond in 2004 and also the first ever introduction of a 'green bond' for projects contributing to sustainable development (JDA, 2015). Although Johannesburg has continued to periodically issue municipal bonds, it has in fact been quite conservative in this area, constrained by tight regulations from National Treasury which contain the risk of borrowing. Bond financing is also 'lumpy' with large injections of funding when a bond is issued but with large negative financial flows when bonds mature (generally between six and fifteen years after issue). On average, however, municipal bonds may add an additional R1.3 billion to the annual budget of the city. The ability of the City to borrow in this way depends on credit-worthiness, with the current situation rather ambiguous<sup>15</sup>. The borrowings through bonds are generally allocated to infrastructure spending, although not specifically to designated programmes such as the Corridors. The Green Bond is ring-fenced for spending on projects such as 'Bio Gas to Energy', 'Solar Geyser' and 'Dual-Fuel Buses' (Goebel, 2017).

A critical ring-fenced source of funding for the Corridors was a R1.68 billion (EU 120 million) loan approved in November 2014 from the Agence Française de Développement (AFD). The loan agreement is publicly available<sup>16</sup> and indicates that the finance is intended for implementing the City's "2014–17 Medium Term Budget including, in particular, two initiatives, the inner city road map and the Corridors of Freedom which aims at reducing poverty and reducing the carbon footprint" (Clause 2A of the Agreement). The loan was coupled with a technical cooperation programme providing French expertise on sustainable development<sup>17</sup>, and a research partnership with the University of Witwatersrand, Johannesburg (Rubin and Appelbaum (2017a,b). The AFD was unusually proactive for a funding institution in its efforts to support the City of Johannesburg in achieving its goals of spatial transformation and compaction in order to encourage a more

<sup>14</sup> The City operates on a narrow financial margin. In 2018/19, for example, it hoped to turn a R1 billion deficit in the previous year into a R1.4 billion surplus.

<sup>15</sup> In 2018, for example, Moody's downgraded the sub-sovereign credit rating of Johannesburg from a stable to negative outlook on a global credit rating of Baa3 while Global Credit Ratings affirmed an AA with a stable outlook.

<sup>16</sup> See at City of Johannesburg website at [www.joburg.org.za/documents/Development/Documents/AFD%203%20LOANS.pdf](http://www.joburg.org.za/documents/Development/Documents/AFD%203%20LOANS.pdf)

<sup>17</sup> This was through separate agreements with the City of Paris, Lille Métropole and the French Institute of Urban Morphology.

<sup>12</sup> The bulk of the city's revenues comes in fact from trading services (76% of total revenue, with electricity most important), followed by property taxes (19.2%) and operating grants (15.7%).

<sup>13</sup> For details see the Local Government Municipal Rates Act, 2004. Online at [www.gov.za/sites/default/files/a6-04.pdf](http://www.gov.za/sites/default/files/a6-04.pdf)



environmentally sustainable urban spatial form in the long term (ICLEI, 2015).<sup>18</sup>

Additional sources of funding for the city's capital budget come from dedicated conditional grants from National Treasury, as well as specified contributions that are required from developers towards costs of installing bulk infrastructure. Most importantly, the construction of the BRT itself is financed through the Public Transport Infrastructure and Systems Grant (PTIS), which contributed R627 million to the City's 2018/19 budget. Although the City covered its capital expenditure on the BRT through these transfers, the ongoing challenge is operational viability with the 2017 National Budget Review indicating that the BRT in Johannesburg is operating at significantly higher operational deficits than anticipated (South African National Treasury, 2017). Of the other grants, it is the Urban Settlement Development Grant (USDG) which is significant in overall terms, providing 23.7 percent of the overall capital budget of the City, allocated to mainly to housing (R1.07 billion), roads (R0.4 billion) and water (0.2 billion).

Certainly, these grants expand the capacity and support the programmes of local government – but through these grants National Treasury is also able to leverage influence over the planning, expenditure and spatial policies of metropolitan government. For example, to access the funds, the city is required to prepare a Built Environment Performance Plan (BEPP) for the approval of National Treasury, which indicates how grant spending is contributing to spatial transformation in the city. While there has been some concern within metropolitan municipalities over this form of control, in the case of the Corridors there is a clear and positive congruence in objectives between the City of Johannesburg and the National Treasury which is overseeing these grants, as advised by its City Support Programme.

The one restriction the city has faced in terms of accessing inter-governmental flows is that the type of brownfield inner city housing development characteristic of densification processes along a transit corridor is not supported by South Africa's ambitious housing programme for low income households. This programme<sup>19</sup> provides state subsidies to private developers, with the state allocating the houses to qualifying beneficiaries. In order to meet the strict cap on grant allocation per household, the developments are typically on cheap land on the urban edge, and the programme is geared towards an ownership option. Housing subsidies are not available for households with incomes over R3500 (USD287) per annum, and given that developers on brownfield central city land are not able to supply housing according to this model, housing development along the Corridors needs to happen without any form of housing subsidy. This has been a longstanding challenge for efforts to provide low-income housing in inner city areas

which the City has tried (rather unsuccessfully) to address through a succession of programmes beyond the subsidy scheme<sup>20</sup>. As the low-income housing envisaged in the Corridors project must come forward with no subsidy component (with the exception of short term property tax rebates), it requires significant creative effort to bring the rental properties on offer within reach of the level of rentals which are affordable to the majority of households in the city (Charlton, 2017)<sup>21</sup>. The lack of a financial model which works for rental in the affordable housing market remains a major constraint on the use of the Corridors programme for inclusionary intentions. In fact, the business model has relied largely on low land values – enabling some acquisition of property by the city itself and ensuring that at least some developers can bring forward a low-income rental model for densification of properties (Todes & Robinson, 2019). Land acquisition by the City has however confronted its weak capacity to manage properties in its portfolio. In 2017, the residents of Orange Grove, a segment of one of the corridors, took to the streets in a furious protest, claiming that many of the JPC-managed properties had been invaded by 'foreign nationals' (interview with Senior Official 16 March 2018). The response of the City, under Mayor Mashaba, was to divest the City of these properties through a public auction (as part of the new inner-city property scheme). There is no formal requirement as to what the new private owners may do with the property, although Mashaba has requested developers to consider the provision of student accommodation (Fig. 12 and 13).

The major categories of expenditure for the Corridors, drawing on all sources of income, are on the BRT infrastructure itself (including dedicated bus lanes, buses, new traffic controls and bus stations); upgrades of bulk infrastructure such as electrical capacity, water, sewer and roads (to support densification); supporting housing developments; social services such as clinics and libraries; and land acquisition. Spatially referenced information provided by the City of Johannesburg reveals the substantial allocation of funding to the Corridors until the 2015/16 financial year, and then a sharp drop in budgeted capital expenditure as a result of the political changes to be discussed below (Table 3).

The extent to which the business model for the Corridors development is working is an extremely complex matter to determine. The critical element for assessment is whether the public investment is catalyzing a requisite response from the private sector, and whether this response is consistent with the development and inclusionary objectives of the programme. In this regard, Harrison et al. (2019), p.11) reveal the complex mix of outcomes in relation to the inclusionary objectives with the benefits in terms of affordable housing, better access to services and transport, and economic opportunity, mainly "accruing to an *upper lower* segment of the market" rather than to the poorest social segments. Furthermore, and especially given the strong political steer and branding of the Corridors project, political changes in the city government

<sup>18</sup> It is significant that AFD Africa Director at the time was a geographer by academic background.

<sup>19</sup> The programme is commonly referred to as 'RDP housing' after the early post-apartheid Reconstruction and Development Programme which initiated this model of subsidised housing.

<sup>20</sup> An early attempt was known as the Seven Buildings Programme in the 1990s which sought to rejuvenate the inner city by providing occupants of degenerating buildings with security of tenure. The programme battled with the social complexities of the inner city and was replaced by the Bad Buildings Programme (1998 – 2007) in which the city acquired buildings in a poor condition and then made them available to private developers for renovation. 'Bad Buildings' was controversial and provoked conflict in the inner city as many of the structures were informally occupied and renovation often involved large scale evictions. Also, it was a small handful of white developers who benefitted. Under Mayor Tau, the Inner City Property Scheme (ICPS) was introduced as an attempt to benefit emergent black real estate developers but the scheme was complex and failed to gain traction. In 2017 Mayor Mashaba introduced an up-scaled version of earlier initiatives with ambitious targets for building acquisition and a simple auctioning process for release of the real estate to the market, although with the stipulation that affordable housing has to be included in the development.

<sup>21</sup> Rentals of less than R1000 (\$80) per month are required to make accommodation along the Corridors inclusionary for a city where one-half of its households have a monthly income of less than R3500 (\$284) (Charlton, 2017).



Fig. 12. Student housing on Empire-Perth Corridor (Photo: author's own).



Fig. 13. Slovo Park informal settlement on Soweto Corridor (Photo: Mark Lewis).

Table 3

Budgeted Capital Expenditure on Corridors of Freedom (in millions of Rands).

Financial Year	Louis Botha Corridor	Empire-Perth Corridor	Turffontein Corridor	Soweto Corridor	TOTAL
2013/14	960.206	86.707	865.219	494.122	2406.254
2014/15	914.415	457.309	1260.036	603.841	3235.601
2015/16	1019.363	493.635	535.504	436.900	2485.402
2016/17	77.000	364.655	211.680	346.853	1000.188
2017/18	161.092	326.699	206.789	429.167	1123.747
2018/19	137.139	125.854	29.900	246.498	539.391

Source: City of Johannesburg Medium Term Revenue and Expenditure Frameworks.

could potentially have significant implications for outcomes over time.

### 3.6. Assessment: Future-proofing a political vision

A major complication in assessing the success of the 'business model' was the surprise defeat of the ANC in the August 2016 local government elections. The new administration is led by the centre-right Democratic Alliance (DA), under Mayor Herman Mashaba, a self-confessed libertarian, but it is a minority administration that remains in power at the behest of the left-wing populist movement, the Economic Freedom Fighters (EFF). The politics is therefore far from straightforward. Mayor

Mashaba is at best ambivalent towards the Corridors, preferring to focus his attention on real estate-led rejuvenation in the inner city, while the EFF is actively hostile to the Corridors arguing that capital investment should go directly into black African townships and informal settlements on the periphery of the city, rather into the Corridors which link historically black and white areas. Despite initial fears, though, the Corridors have not been removed from the City's plans and budgets, and DA politicians responsible for spatial policy continue to acknowledge the value of compacting the city, including providing low-income housing options in the central areas. But the Corridors project has been downgraded in priority and budgeting (as clearly indicated in Table 3) and their rollout is likely to take longer and be at a lesser scale than initially envisaged (various interviews with Senior Officials and Politicians)

Political change does complicate evaluations and so does the fact that the implementation of the Corridors was intended as a long-term, incremental process, possibly extending beyond twenty years. Nevertheless, the experience over the past five years offers some indication of potential outcomes. There is not yet clear evidence that the Corridors have managed to realign mainstream investment in the city away from entrenched spatial and market-related patterns which prioritise suburban developments for both high income and low income housing. However, the Corridors have attracted some small- to medium-sized real estate developers, mainly in niche markets such as student housing (Todes & Robinson, 2019) or in localized pockets where networks of local owners, developers and financiers (often known to one another over a long period of time) are creating an affordable rental product with close management, small but well-maintained units, and relatively secure tenure. The JDA reports that by 2017, there were 60 applications for developments approved or pending along the Louis Botha segment of the Corridors, involving an estimated 4500–5000 units mainly in the affordable housing segment (JDA Official, Pers. Comm, 2017). This progress suggests that if the political interruption had not occurred, a momentum could have built up around the Corridors programme with a significant spatial impact evident over the medium- to long-term.

Although the new regime is politically sensitive to the need for affordable accommodation, especially given its *de facto* alliance with the EFF, its primary political base remains the white middle class, and it is unlikely that it will have the political will to override NIMBY-type protests against the provision of affordable housing along those corridors that pass through the suburbs. Also, with its political fragility, the coalition government is directing expenditure to visible, mainly short-term, service and infrastructure improvements, and away from longer-term investments, including along the Corridors.

Before the change in political authority, there was an appealing prospect that innovative new land use management arrangements, such as proactive granting of zoning rights along the Corridors, and pre-approved designs for site development, would bring in new investors and accelerate development processes. However, these proposed reforms did not gain final approval from Council, and have been put on hold indefinitely.

Senior officials (current and previous) we interviewed had different views on the impacts of political change on the progress of the Corridors. One official called the outlook for the development "pretty grim" (interview on 16 March 2018) while others emphasized a mix of possibilities that remain, given the complex nature of the coalition arrangements (interview with senior official on 22 March 2018; interview with politician, 22 February 2017). In February 2019, for example, Johannesburg became the first city in South Africa to introduce an 'inclusionary housing policy', requiring developers to set aside 30 percent of new housing units for affordable accommodation.

While the political change has had a material impact on the prospects for development along the Corridors, there are some challenges which have persisted across political cycles. The most significant, arguably, is that the City has never found an adequate model for the delivery of affordable rental accommodation. The 'RDP housing programme' allocates free housing on an owner-occupied basis to low income



households, although often in spatial peripheral locations, burdening households with high transport costs. Thus there is strong demand for well-located affordable housing, close to workplaces and urban centres, but without a rental subsidy the Corridors programme is dependent on private sector provision which does not reach the poorest 50 percent of households in Johannesburg (Charlton, 2018).

The institutional and financing components of the 'business model' for the Corridors development are contextually embedded, relating closely to the existing processes of City and the wider structures of government. A decision was taken - whether explicitly or by default - that the programme would be delivered through the existing institutional and financing structures of metropolitan government without setting up special arrangements. At most there was marginal adjustment to 'normal' process, such as the use of the JDA in the integrated implementation of mixed use precincts and the negotiation of a special loan from the AFD, targeted specifically at the Corridors.

The question in retrospect is whether this was the correct decision. There is no easy answer to this. At one level, mainstreaming a programme in existing processes ensures long term sustainability. Using existing institutional arrangements has reduced setting up cost and time, and helped 'mainstream' the programme, securing commitment to implementation across municipal departments. In the same vein, the project has benefitted from the capacity to rely on internally generated resources supported by urban development across the city (in the form of property taxation), and to use municipal influence to gain central government resources (in the form of grants) or external developmental funding (the AFD loan, and bond financing). Moving outside the context of municipal financial flows would perhaps require a new financial model which, if it stimulated property values in the immediate area of the corridors, could jeopardise the goal of realizing extensive centrally-located low-income affordable housing - although this remains a distant possibility for the corridors to date. Using existing financing arrangements has also provided a level of stability in investment. An interesting comparison is with Sao Paulo in Brazil where infrastructure is provided through an innovative programme of land value capture. However, this programme depends on ongoing demand from private developers for additional rights, and during the recent economic recession, it has brought in very little income for new public infrastructure (Halbert et al., 2016). In Johannesburg where existing and more mundane financing mechanisms are used, the available finance for the provision of public infrastructure has been more constant across economic cycles.

The downside of using existing structures and mechanisms is that there are continual transaction costs in terms of required institutional coordination and with political change the urban development programme may become lost within the complex workings of city government. Setting up a dedicated structure for the programme, such as an area-delineated Development Agency, would have separated off the Corridors from other programmes in the city, but may have helped ensure a continued focus on the Corridors after political change. Whether, over the long-term, the wisdom of relying largely on what exists institutionally in the City to deliver a mega programme, proves correct or not, in this respect the case of Johannesburg is distinctive from the other two we have looked at, and warrants careful attention as a 'development model'.

*Both the municipally-mandated development corporations which were key to the governance of the Lingang case, and the internal institutional arrangements put in place for the Corridors project, throw some light on the changing institutional forms associated with the London case. Here, the usually informal arrangements for collaboration between metropolitan and local governments to bring forward large-scale developments in London were superseded by a new form of metropolitan development corporation. The relative autonomy of the development corporation varied over time and, as in Johannesburg, the divergent priorities of different state actors and different levels of government were relevant. In London, though, rather than the vagaries of municipal level politics, navigating the interests of state institutions of different scope and scale played an important part in determining the*

*progress of the development.*

#### 4. Building a new piece of the city: Spaces of exception and fragmented financing in London

##### 4.1. A metropolitan spatial strategy? Opportunity areas and housing targets

The starting point for our research on this case study, an area of North London now known as Old Oak and Park Royal (see Fig. 14), came when the Just Space network of community groups, working on a mutual support basis to engage in strategic planning issues across the city (Brown, Edwards & Lee, 2014; Lipietz, Lee and Hayward, 2014), became aware of the large scale of developments planned in response to future transport investments in the area. These were, an east-west cross-London train line giving fast access to key central activity areas including the financial centre ("Cross-rail"); and a high speed train linking London to the north (High Speed 2 - HS2), especially to the old industrial heartland, now the emerging agglomeration of "Northern Powerhouse" cities, centred on Leeds and Manchester. Some initial community meetings led to the formation of a network, Grand Union Alliance in 2013, and we worked with this group from that time until late 2019 to engage with the planning process there from a community perspective (see acknowledgements). In official circles, though, the potential for a large-scale development in the area had been under discussion for some time before this. Published in 2011, the Park Royal Opportunity Area framework, covering much of the area which came to be included in the Old Oak Park Royal Development Corporation (OPDC, established in April 2015) was already alert to the possibility that both HS2 and Crossrail stations might be located in the Old Oak area, with significant consequences for the potential for development in the surrounding area. It was some time before relative certainty on the transport investment was available (only in February 2020 was a final decision made to proceed with HS2). The vastly increased potential scale of development in the area was flagged in the Mayor's London Plan of 2014 (See Table 4), and had already galvanised the local planners in Brent, Ealing and Hammersmith and Fulham to interface with the Mayor's regeneration team at the Greater London Authority (GLA). This led to an ambitious early vision for the area (Greater London Authority GLA, 2013), followed by preparation of a relatively informal planning document for the area, an Opportunity Area Planning Framework (OPDC, 2015; Interview, Local Planner, 2014, Community Representative 4, 20/4/2017; GLA Officer 2, 2014).

Opportunity Areas (see Fig. 14) were defined in the first Mayor's London Plan (2004) - the strategic spatial plan for the Greater London Authority. Metropolitan level government in London was reconstituted in 2001 after a period of central government control (Travers, 2004). The GLA covers central, inner and outer London with an estimated population of 8.825 million in 2017 (see [www.data.london.gov.uk](http://www.data.london.gov.uk)), but excludes many neighbouring and functionally integrated areas across the wider urban region of the South East, which amounts to 24.2 million people (Greater London Authority GLA, 2017). Largely a consequence of deindustrialization and changing urban land uses, Opportunity Areas are a key element of the overall strategic spatial plan for the city. Alongside "corridors" for development stretching into the wider South-east region, town centres, neighbourhoods and the blue ribbon network, the Mayor's strategic planning has focused on opportunity areas as key sites for accommodating new housing and jobs:

Large and underused brownfield sites, which are made much more accessible by new or improved public transport services will be considered as potential locations for new urban villages. These are seen as being comprehensively planned, high density developments, containing a mix of uses and a mixture of housing types and tenures, integrated into their localities. (Mayor of London, 2001).

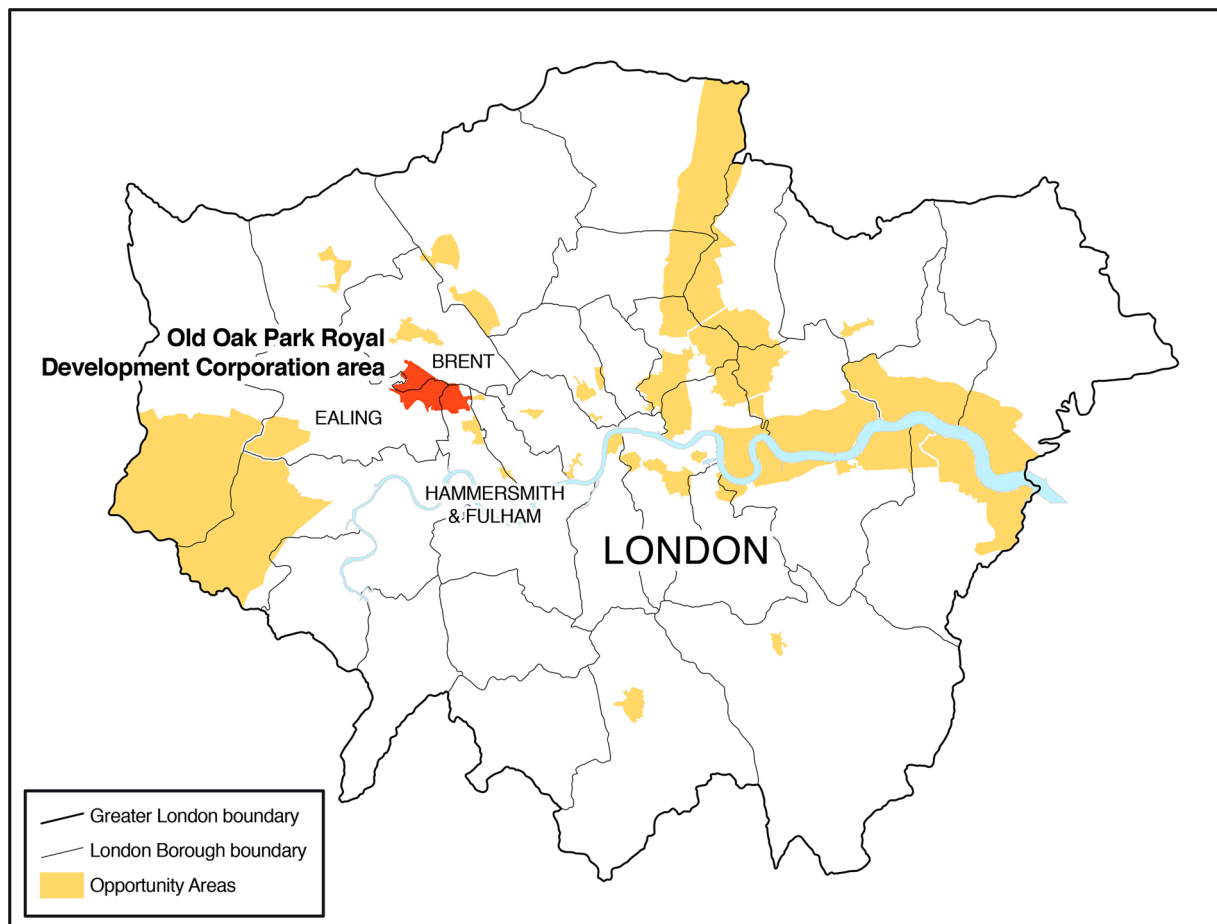


Fig. 14. Opportunity Areas and London Boroughs.

These areas are a key part of the policy objectives to accommodate London's growth within its boundaries and without encroaching on open spaces, to "enable the centre of London and the main Opportunity Areas for development to intensify and to accommodate much of the growth in jobs". (Greater London Authority GLA, 2004, p. 6). This definition of Opportunity Areas developed in the first London Plan has persisted over three Mayors and five plans, but with a growing emphasis on their role in accommodating new housing rather than as new employment centres. Transport links have become increasingly determinant of the potential for Opportunity Area development – new Opportunity Areas are identified for development flowing from improved transport connections, as in the OPDC with HS2 and CrossRail. But, in a rather more circular format, developments themselves can also generate the funding for new transport links through intensification, a process which is also evident in the OPDC area.

The planning and development of "Opportunity Areas" has become routinized, as the Mayor's planning team works closely with local boroughs to develop "Opportunity Area Planning Frameworks", which are consulted on, and which have planning weight as a result of their association with the strategic metropolitan-wide London plan. However, they are not themselves subject to public scrutiny and assessment by Planning Inspectors. They are in effect informal planning interventions, with enormous consequences for the future city of London. Through the London Plan, they propose a certain quantum of development prior to any detailed technical assessment of feasibility, or place-based assessment of their impact on existing neighbourhoods and uses (Just Space, 2014). In an important development, however, the "Examination in Public" Hearings which formally reviewed the London Plan through 2018–19 saw acceptance by the Mayor's team that the proposed

capacities were only "indicative" and that they should be further tested in local plan preparation i.e. the London Plan could not set arbitrary targets outside of the formal local plan process (Mayor of London, 2019, Fig. 2). In addition, although a revised version of the OPDC Local Plan did not amend these figures, challenges to the viability of the OPDC development given the costs of relocating existing flourishing businesses in the area meant the Inspector of this plan pressed down on the capacity to realise these figures within the plan period (Table 4). In order to realise these very high targets, since the 2014 London Plan Opportunity Areas are able (and encouraged) to establish their own identity, regardless of surroundings, supporting denser and more high-rise developments (Greater London Authority, 2015, p. 62).

It is in this context that the establishment of the Old Oak Park Royal "Development Corporation" can be located. The Localism Act of 2011 (UK Government, 2011) opened up the possibility for Mayoral Development Corporations to be created, whereby the Mayor can assume full planning control, develop a Local Plan, levy a Community Infrastructure charge, and act as the planning authority, determining planning applications in a defined area. This potentially regularizes the planning process for Opportunity Areas, and has been implemented in one case, the one we are exploring here, Old Oak Park Royal Development Corporation, in addition to the inherited institutions from the Olympic Development Agency (London Legacy Development Corporation). The GLA assumes the running costs of the OPDC, which are not insubstantial: £6.9 m 2016–17 and £9.5 m promised in 2019–20 (Mayor to CEO OPDC 6/12/2016; OPDC Budget and Capital Strategy 2019–20<sup>22</sup>) including

<sup>22</sup> [https://www.london.gov.uk/sites/default/files/opdc\\_budget\\_and\\_capital\\_strategy\\_2019-20\\_opdc\\_board\\_28.11.2018.pdf](https://www.london.gov.uk/sites/default/files/opdc_budget_and_capital_strategy_2019-20_opdc_board_28.11.2018.pdf)

**Table 4**  
Evolving Housing and Employment Targets for the OPDC Area.

Date/Source	Area	Homes	Jobs	Comment
London Plan (2004)	Park Royal 470ha	–	10,000	
Replacement London Plan (2010)	Park Royal/Willesden Junction 751ha	1500	14,000	Logistics Function; Park Royal industrial and mixed-use development
Park Royal OAPF (2011)	700ha	3500	11,000	Mixed use development, housing not to interfere with industrial uses; “any release of Strategic Industrial Land (SIL) ...must be related to the delivery of a HS2 station, and or Crossrail station.” (p. 68)
Old Oak Vision Doc 2013 (Farrells)	“land around hs2 station”		19,000 homes, 90,000 jobs	
DFALP Draft Further Alterations to the London Plan (2014)	Divided into Park Royal (713 ha) and Old Oak Common (155 ha)	PR: 1500 OO: 24,000	PR: 10,000 OO: 55,000	“Old Oak Common ... could make a major contribution to London’s position as a world business centre.” (p. 307–8)
OPDC, Opportunity Area Planning Framework (2015a); OPDC Local Plan Regulation 18 Consultation Draft (2016); OPDC Local Plan. Revised Draft for Regulation 19 Consultation (2017)	650ha	25,500	65,000	Does not set planning policy, but takes numbers from London Plan
Old Oak Park Royal (2018) (Second Regulation 19 Consultation) Draft Local Plan, 20 year plan period	Portion; some central government-owned railway land not available in plan period	20,100	40,400	“Our Proposed Outcome: A world-class transport super-hub at Old Oak Common, supporting the creation of a new part of London that acts as a catalyst for growth at national, regional and local levels.” (p. 16)

**Table 4 (continued)**

Date/Source	Area	Homes	Jobs	Comment
Inspection of Local Plan, Interim Findings (Inspector, OPDC Local Plan, 2019)	Contestation of the Local Plan by the major private landowner in the Old Oak area saw a detailed review of the viability of Sites 2 and 3 (Fig. 15), concluding that as Car Giant has a flourishing business, the costs of covering existing land value, or relocation costs, or extinguishment costs, would render these sites unviable. They were to be removed from the local plan figures, but still allocated for redesignation from strategic industrial land (September, 2019).	14,200	37,590	“Paragraph A1.2 of the London Plan goes on to affirm that these estimates and guidelines will be tested through the preparation of planning frameworks and/or local development frameworks. As a result of that testing, the delivery figures put forward in the submitted plan are not 25,500 dwellings and 65,000 jobs but are 20,100 dwellings and 40,400 jobs, figures which have been certified by the Mayor for London as being in general conformity with his Plan. That testing has continued, in part, through this examination, as a result of which I conclude that the delivery figures of 20,100 dwellings and 40,400 jobs over the next twenty years should be reduced further to 14,200 and 37,590 respectively.” (Inspector, OPDC Local Plan, 2019).

staffing, and consultancy costs associated with commissioning planning documents and preparing for planned infrastructure investment.

Also important to note is the financial envelope within which the strategic development goals of the Mayor can be realised. By the time the London Plan process was initiated in 2000, the practice of securing the infrastructure for development to proceed, related social infrastructure (community facilities, public space, schools and health care provision), as well as social rented and other kinds of “affordable” housing delivery through planning gain negotiated with developers had become routinized, as local and central government sources of funding dried up under successive neoliberalizing governments (Booth, 1996; Bowie, 2010; Canelas, 2018; Robinson & Attuyer, 2020; Watt, 2009). The challenges of providing for London’s development through planning gain (in this context, direct, one off negotiations with developers for a share of the value generated in a development) were recognized early in the London Plan process. This included concerns about placing pressure on developments to generate more profit, leading to more tall buildings



and undermining design quality, and forcing difficult trade-offs. In the evidential hearings on the first London Plan before the London Assembly, “The London Development Agency and Transport for London agreed with the Committee’s concern that too much planning gain could be tied up in achieving 50 % affordable housing, leaving little for funding public transport infrastructure and training initiatives.” (London Assembly, 2001, p. 21). In 2019, the same constraints and debates emerged in relation to the Draft New London Plan. In the face of restricted finances the Mayor most recently pitted himself against local communities by seeking to prioritise delivering transport infrastructure and housing (in his own political interests), leaving the provision of social infrastructure and community facilities through planning gain as residual (Mayor of London, 2017, Chapter 11).

More generally, the Mayor of London has relatively weak statutory and financial powers to set the terms of development across the city. Although there has been some increase in devolution of financial resources to this layer of government, this still reflects a significantly limited fiscal capacity which does not always match devolved responsibilities (London Finance Commission, 2017). Efforts to secure additional consolidation of fiscal capacity at metropolitan government level have not been successful or have come at a cost. Especially notable is the devolution of responsibility for the Transport for London (TfL) budget, resulting in loss of a £700 m operating grant from central government (Transport for London, 2018). One way in which TfL envisaged making up this shortfall, was to use their land holdings to engage in property development. The lack of direct funding streams for urban development has therefore come to press on the production of the built environment – which our case study of the OPDC illuminates. The “funding” elements of the Mayor’s 2017 Draft Replacement London Plan makes all too evident the dependence of the plan’s delivery on the extraction of planning gain from developers – no other sources of finance are identified to meet the extensive and impressive planning policies brought together in this plan (Mayor of London, 2017, Chapter 11). The future city, including Old Oak, is to be built primarily on negotiated developer contributions. Any central government contributions come only after efforts to secure planning gain have been exhausted, and generally take the form of competitive bids for grants which seek to orchestrate central state objectives (such as encouraging homeownership). Under current government policies, this reinforces trends towards maximising the numbers (rather than affordability) of houses delivered (personal communication, OPDC planner).

It is not only fiscal withdrawal which sets the strategic frame for developments in London, but also the intensification and politicization of the pressure to address a mounting housing crisis (of affordability and numbers) and to do so within the Greater London Authority Area with a strong focus on inner London, as opposed to across the functional region of the southeast of England or in wealthier outer suburban areas. Mayors have assumed increasingly onerous housing targets, based on controversial high population growth scenarios – and the current Mayor (2016–2020) has made this a key element of his political platform (Bowie, 2015). As we will see, the OPDC and other bodies responsible for housing delivery necessarily take the political lead from the Mayor on this and press for increased quanta of housing on each development site, while also seeking to deliver a higher proportion of “affordable” housing (Interview, Planning Committee 1). “Affordability” has become a deeply controversial and politicised term. In a context of deepening inequality and high land values, with limited state resources, matching delivery to the expansive political rhetoric about addressing the housing crisis means that a higher volume of housing delivery has been prioritized over meeting the needs of the poorest. Not only are few “affordable” homes delivered as a result, but the intensification of developments to meet housing targets and pay for core infrastructure for the development undermines the quality of the built environment more generally, diminishing wider social infrastructure provision and significantly affecting the quality of the development overall.

#### 4.2. Piecing together the resources: assembling transcalar state agency

With few resources available to pay for infrastructure, and a highly fragmented political system (33 local authorities and a relatively weak capstone Mayorality – Travers, 2004), the need for collaboration across jurisdictions was apparent from the beginning in the Old Oak area. The core development area cross-cuts three London Boroughs (small local government bodies, traditionally focused on delivery of social welfare, housing and education functions, usually with around 200,000–300,000 people per borough) and comes within the orbit of major developments in a fourth (see Fig. 15). As with many large-scale developments, the jurisdictional complexity of this case presented numerous challenges. In this context, the opportunity arose to draw on a new competency for the GLA, empowered to create “Mayoral Development Corporations” in the 2011 Localism Act, and the Old Oak Park Royal Development Corporation was created on 1 April 2015. Initially strongly supported by the borough with most land in the core development area, political change (from Conservative to Labour) came too late for a vocal new Labour leader who sought to oppose the handing over of planning authority, and potentially valuable sources of income, to the then Conservative-led GLA. However, concerns are often expressed about the institutional capacity of local boroughs to manage such huge developments (Interview, GLA Officer 1), and the development of Opportunity Areas do anyway usually proceed through collaborations between the Mayor’s regeneration teams and local boroughs. Establishing a formal Development Corporation to take over planning powers from the three boroughs, with representation from each borough on the Board and the planning committee, provided a new way to navigate the relationships amongst the GLA, OPDC and the three London boroughs. This has required considerable diplomatic investment and regular communication on the part of the lead actors (Interview, GLA Officer 1). Frequent challenges ensue from the boroughs regarding their representation on these decision-making bodies, the redirection of income streams intended for councils to fund the development, and the amount of affordable housing to be developed in each borough (Interview, Politician 2).

Income sources to enable the development to be brought forward were quickly a concern. Of course, the major investment in new railway infrastructure from the central government (cost estimates vary widely, ranging from £60billion to £100billion) means massive increases in potential land value in the vicinity of the stations. But like many of London’s brownfield sites made up of former industrial areas and railway lands the OPDC area is poorly served with more fine-grained access and cross-routes, requires costly land remediation, and incorporates inconvenient variable levels. Given the intense interest in London’s property market over a long period of time, remaining developable land is by definition often hard to develop. Early hopes were that the large amount of OPDC land (75 %) in public ownership (largely owned by Network Rail, the state-owned operator of the national railway infrastructure) might open up a different model for housing delivery, in which outcomes could be more strongly directed to the “public” or policy interest in “affordable” housing delivery. But these were dashed by the central government’s own plans. Alert to the potential development value of land they owned, Network Rail and the Department for Transport (responsible for the land along the proposed HS2 high speed train tracks) were guarded by a government department well-versed in the potential to make money from property development adjacent to major infrastructure investments, including Kings Cross railway land and the land surrounding the Olympic site. The rail authority developing HS1 (the first national High Speed train, the channel tunnel link to continental Europe) had morphed into a wholly state-owned property developer, LCR (London and Continental Railway), whose strategy involves seeking to maximise value of their property assets through land sales (with planning permission to share in the value of the development) and entering into joint ventures with development partners to share in equity growth (Department for Transport, 2011, Annex C; cf. Christophers, 2017). In 2015 they formed a “new HS2 Growth

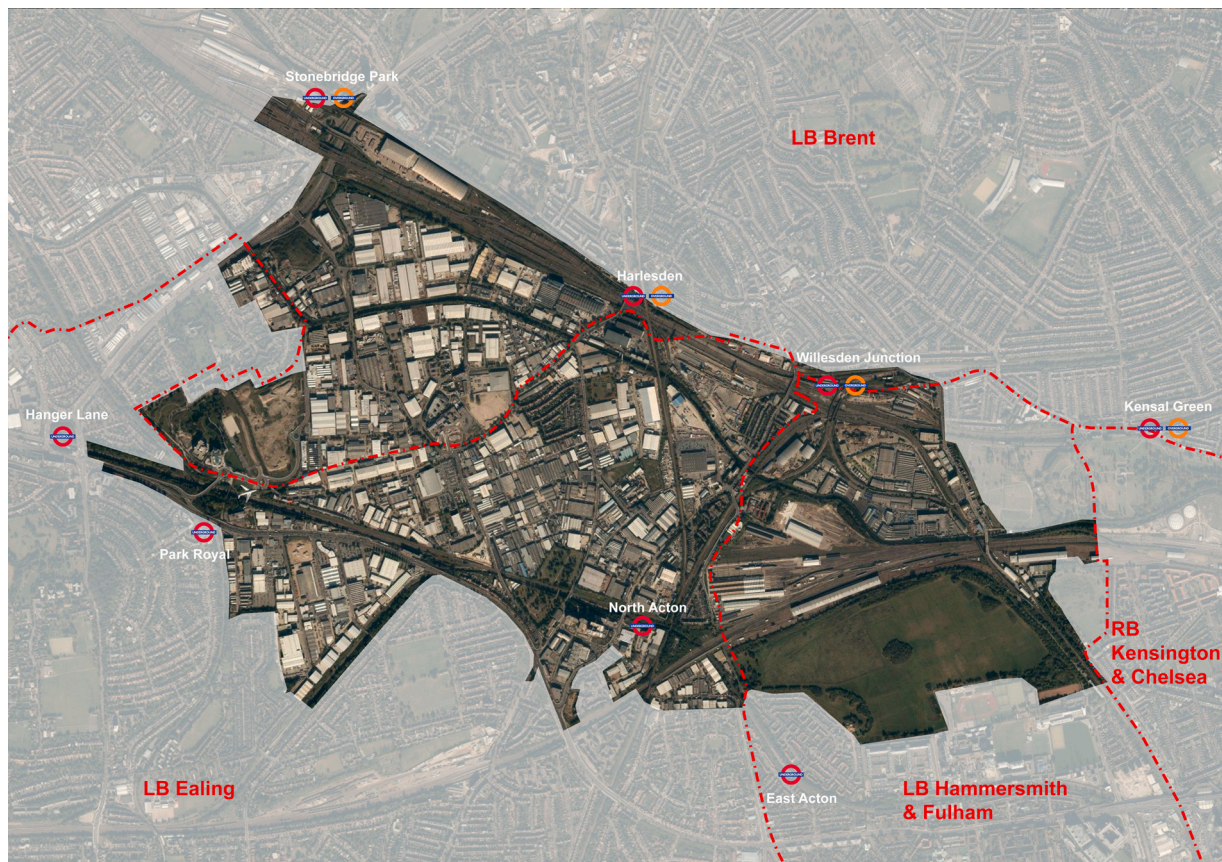


Fig. 15. Aerial view of OPDC showing London Borough boundaries. Note predominant industrial and railway land use (supplied by OPDC).

partnership” with HS2 and other government departments (Network Rail, Homes and Communities Agency, Network Rail), described as “a cross- Government initiative between HS2 and LCR to support the delivery of growth and regeneration around HS2 stations” (<http://www.lcrhq.co.uk/our-business/hs2-growth-partnership/>), which includes development of the valuable rail lands at Old Oak common.

The conservative Mayor Boris Johnson did manage to secure a “Memorandum of Understanding” in 2015 with the government body, Network Rail, concerning the development of these lands (keeping them in public ownership). But the expectation that any transfer to the OPDC would entail realisation of the existing use value of the site by Network Rail (personal communication, OPDC Planning Officer), meant that the incoming Labour Mayor (in 2016), Sadiq Khan, was of the view that this was a worthless agreement, making no contribution to bringing forward the land for development. A senior GLA official noted that one issue concerned the potential redistribution of development benefit from London:

What the OPDC was trying to do, is to own the land. The public sector takes the land value uplift and invest it back into the area. But while you’ve got land in public sector ownership already and the government with the great need to bring the cost of HS2 down; it’s a very difficult negotiation because they would probably want to take the land value uplift and pump it back into HS2, right along the line up to Manchester and beyond. The mayor would not be happy about uplift being taken from London; land values in London being invested in Birmingham for example. But if you are national government you don’t see a boundary nor should you. (Interview, GLA Official 1).

With this in mind, there was growing concern that the Department for Transport and its agencies had now become a competitive party in the potential development of Old Oak. Public sector representatives, including DfT, were therefore removed from the OPDC board, only

attending by invitation to discuss specific issue (Interview, OPDC Officer 1). Explicit concerns were raised regarding “conflict of interest” with the OPDC, as it was clear the rail bodies formed a major interested party in the long-term development of the area. As a member of the OPDC Planning Committee noted, DfT seemed to be saying, “We are here for the regeneration game. We are here to create something exciting in West London. By the way, we want all our money as well.” (Interview, Planning Committee 1). In his view, their commitment to regeneration should lead to their putting the land in for free and taking a share of the profits at the end. This was not on offer.

The MOU was subject to detailed master planning work to determine the costs and potential for development on the specific sites (See Fig. 16, below), which was also required to support a bid for central government funding (a Housing Infrastructure Fund) for an early phase development to be led by the OPDC (see below). But because of the reticence of the public sector bodies to yield on achieving maximum value for their land, the redevelopment of the railway land has been pushed into the very long term, beyond the twenty-year period of the draft local plan (See Table 4), placing significant development pressure on other sites in the project. Thus during the course of negotiations, it has become clear that what had been widely expected early in the process, that public sector land ownership could fund the development and enable innovative kinds of affordable and rental housing to be brought forward, would not be available. A GLA Officer (Interview, GLA Officer 1) commented: “... that is the holy grail of this sort of work; it’s land value capture. [Otherwise] the public sector does a lot of the heavy lifting in the early stages but the profit goes to the private developers at the end of the process.”

As an OPDC Officer noted, “all this politics”, negotiating across different government departments and entities, has “a big impact on our projects... on how far projects move forward or not”. (Interview, OPDC Officer 1). More generally, the lack of purchase on central government



has been a key limiting factor in the forward planning for the area, since despite extensive lobbying in relation to the sizeable infrastructure investment needed to open up the Old Oak development site, and the obvious long term benefits to the exchequer in national tax returns, little state investment has been forthcoming.

In a significant breakthrough, a central government commitment of £250 million towards infrastructure for early phase developments in the North of the site was won in 2019 in a competitive bid (the Housing Infrastructure Fund of the Department of Communities and Local Government). But this became mired in controversy as the bid was associated with a secretive master-planning process leading to a surprise announcement in February 2019 that it depended upon the proposed compulsory purchase of 25 % of a major private landowners' holdings (see Car Giant's explanation at [https://www.london.gov.uk/sites/default/files/rep-42-004\\_dp9\\_obo\\_old\\_oak\\_park\\_ltd\\_explanatory\\_note.pdf](https://www.london.gov.uk/sites/default/files/rep-42-004_dp9_obo_old_oak_park_ltd_explanatory_note.pdf)).

This developer had already been in negotiations for more than four years with the OPDC concerning their own masterplan proposals. The ensuing conflict between the OPDC and this major private developer has significantly stalled this part of the development. After public review, the Local Plan now excludes this large piece of land from the planned development for the foreseeable future - the twenty years of the local plan period (Inspector OPDC Local Plan, 2019). These proceedings have exacerbated the increasing uncertainty surrounding private sector investment in this development which had already become apparent following the UK's changing relationship with the EU.

This proposed government contribution (which has been lost due to the controversy) was only a small part of the wider infrastructure costs which have been estimated at £1.5bn in the formal Development Infrastructure Financing Study (Regulation 19 evidence base, document 13.), rising to £2.5bn in the Mayoral review of 2017 to include potential land acquisition (compulsory purchase) costs. Furthermore, the Housing Infrastructure Fund strongly encouraged maximising housing delivery and planning gain returns, leading to greater density of development. Central government funding did not provide the leeway to promote an alternative kind of development, supported by public funds. In fact, it exacerbated the density and arguably pushed the development beyond compliance with its own policies (OPDC, 2018a, b).

The new Mayor himself has sustained the OPDC, established by his predecessor, but was initially not very facilitative of the development, with one participant commenting, "we were sort of hoping that the Mayor might wind it up ... Obviously he didn't, he sort of killed it by other means" (Interview, Politician 2). For example, he brought forward a spatial plan for London requiring full replacement of the strategic industrial land in the Old Oak area which was to be de-designated to allow the development to proceed, thus requiring significant intensification of land use in the industrial Park Royal part of the development. This created a new hurdle for the OPDC, despite the fact that this de-designation had been long anticipated in GLA planning documents (Greater London Authority GLA, 2011). This required a redrafting and re-consultation on the Regulation 19 local plan in 2018. More generally, however, the pressure on industrial land prices due to wider loss of industrial land across the city (Ferm & Jones, 2016) – the reason for the new Mayor's policy change - placed pressure on the viability of the major private sector development, as the costs of relocating the existing business had increased substantially during the course of their preparation work (Inspector of OPDC Local Plan, 2019).

On the other hand, after a period of relative independence, the Mayor has tied the OPDC more closely to his own policies on development and housing targets, drawing the OPDC into a closer relationship with the GLA, including absorbing some of its functions into the core GLA business, such as his Homes for London, Land and Regeneration teams and appointing as the caretaker CEO his own director of Regeneration when the two most senior members of the OPDC team departed. Together with the behind closed doors Masterplanning process, the expanding role of the Delivery Arm of the OPDC in its capacity as developer also reflected a decline in the participative and collegial

approach which had, from the perspective of some, shaped the first years of the OPDC practice (Community Representative 2 and 3, 03/08/2016; Old Oak Neighbourhood Forum (OONF, 2017). This shadows the growing role of local authorities (Beswick and Penny, 2018) and the Mayorality (Transport for London, 2017; 2018) in directly undertaking developments - but the discussion in the following section indicates that the particular configuration of state interests is driving the intensification of developments in London more generally.

In sum, then, a new institutional model of the Mayoral Development Corporation has re-scaled planning and development authority away from the local boroughs to the Metropolitan authority, and for some time at least created a relatively independent Development Corporation within this authority. However, the operations of the OPDC are highly localized around the clearly demarcated development area, and are dependent on convening a transcalar alignment of actors and interests in relation to that specific area, often with deeply challenging intra-governmental relationships, from very small local boroughs to powerful national state agencies and central government departments, and a weakly capacitated metropolitan Mayor. The result of the conflicts of interest within the state in terms of the role of land in financing the development is that, absent success with further competitive bids for central funds, the OPDC has been thrown back on a "business as usual" model of development for London. This means extracting value from the specific development through planning gain negotiations with developers to cover the necessary investments to make it feasible (Mayor of London, 2016). The following section explores the fragmented, territorialized format of this development financing more fully.

#### 4.3. Business as usual in London: Each development pays for itself

Estimates indicate that the comprehensive regeneration of Old Oak could generate £7.1 billion of Gross Value Added (GVA) annually to the UK economy, and huge potential funding streams from Community Infrastructure Levy (CIL) receipts (Old Oak and Park Royal Development Corporation (OPDC, 2015a).

I think we are recognising it's probably not solvable within its own red line. Here we need to do that work to demonstrate that it would fail on its own, the market (Interview, OPDC Officer 5).

As central government support for local development and social housing has withered, what started as a progressive methodology for extracting profit from developers at the point of development (as "planning gain") in the post-war period, as a complement to extensive central state-supported financing, is now the primary source of state financing to realise public and policy interests in urban development, including for a substantial proportion of housing provision (Booth, 1996; Bowie, 2010; Crook, Henneberry, & Whitehead, 2015; Healey et al., 1992; Thornley, 1991, Chapter 7; Watt, 2009). Government policy has increasingly recognized and sought to harness the central role of planning gain in housing provision and enabling developments to proceed (Town and Country Planning Association, 2018; UK Government, 2018).

Most development across London is therefore currently driven by direct developer contributions drawn from the specific development in question, rather than income from wider taxation or pooled resources across the city. *The consequences of this became apparent to us through our comparative analysis – both Shanghai and Johannesburg aggregate income streams at a scale wider than the specific project, offering scope for supporting and investing in developments by drawing on resources across wider temporal and territorial dimensions, including beyond the city. The London case therefore presents an intense version of "governing by project" (Pinson, 2009).* However, this dependence of urban development on highly territorially circumscribed extraction of value is not widely acknowledged outside of urban planning circles – the London Finance Commission (2017), for example, omits to consider planning gain as an



existing funding stream for local and metropolitan government. “S106” contributions, negotiated on a development by development basis, and CIL (Community Infrastructure Levy)<sup>23</sup> charges, determined at the local borough (planning authority) level, amount to significant income streams which in the face of fiscal withdrawal are now the main mechanisms for funding both “affordable” housing and general “urbanisation” – the development of new urban areas. The expectation and dependence on direct capture of value from the immediate territory of specific developments forms the general model of development in London. This takes the form of either a tax in kind (affecting design, infrastructure or other services provided in the development) or a financial contribution in lieu, extracted at the moment of construction, to finance that development (Colenutt et al., 2015; Crook et al., 2015).

In an uncomfortable fit, the increasing dependence on planning gain as a funding stream has emerged in tandem with a now long-embedded practice of targeting redevelopment on small parts of the city, often with separate governance arrangements. Thus, over time there has been a varying array of territorially defined urban development corporations (on and off since the 1980s – Brownill, 1999; Raco, 2005), regeneration partnerships in the 2000s, site by site developments across the city, and, relevant to the case of Old Oak Park Royal, large-scale developments orchestrated through co-operation between the metropolitan GLA and local boroughs in “Opportunity Areas”. All these exacerbate an already fragmented political landscape where income streams flow through thirty-three poorly co-ordinated local authorities each of whom is tasked with planning policy and development control, overseeing housing delivery and now encouraging business development (Penny, 2017; Travets, 2004).

Together, this patchwork of fragmented institutions and tightly delimited territories for value extraction has placed significant pressure on the kinds of built forms being generated. Glossed as a “new London vernacular” by some (Design Council, 2011; Urban Design London, 2015), the tight entwining of the form of the built environment with the needs of a residual welfare state, planning policy compliance and increasing pressures for value extraction for “affordable housing” produces minimalist buildings with some strange features. Thus we observe ubiquitous but useless verandahs to meet amenity space standards<sup>24</sup>; or children’s playgrounds on the roof, counter to the norms of London-wide planning policy which stresses accessibility and surveillance of play areas (OPDC, 2018a, b (June), p. 37). More generally, to maximise the built footprint on the site, the developments press at height norms, and provide reduced open spaces, including above-ground provision on podiums and roofs within high rise buildings (OPDC, 2019). Compared to the existing built fabric of the city, the urban form of London is being significantly re-styled with a new typology of very dense developments with very tall buildings, as a direct result of the specific territorial format of the regulatory, institutional and financial regime (Old Oak Neighbourhood Forum (OONF, 2017; Robinson & Attuyer, 2020).

Over time, then, a focused, fragmentary territorialized format for development has become a *modus operandi* for London development, but increasingly lacking crucial ingredients of earlier programmes from the

1980 and 1990s which drew on substantial central government financial investment and institutional capacity in planning policy and development management (Fainstein, 2001; Imrie & Thomas, 1993; Thornley, 1991). Furthermore, the potential to leverage the finances for enabling development on these fragmentary lines – each development funding itself – has been narrowed as competition over urban land value has intensified amongst an array of actors, for whom generating urban land value is seen as a solution to financial constraints or an opening to realise their goals, expand their operations, or take increased profits (see Kaika and Ruggiero, 2016, for a more general discussion). So, for example, in Old Oak Park Royal land value capture should: flow to central government departments to maximise their returns on infrastructure investments (Department of Transport’s LCR); fund core local government business; leverage loans for enabling early infrastructure investment in long term development projects; realise the planning gain to support housing, affordable housing, social rent level housing, education, schools and community infrastructure, as well as planning policy goals concerning public amenities, sustainability, air quality, environmental protection – and cover the costs of transport infrastructure to enable development. Moreover, in order to seek to maximise delivery of housing and “jobs” the metropolitan spatial strategy designates Opportunity Areas as “spaces of exception”, where heights and densities can exceed norms, establishing the character of the area independently of its surrounds; and where affordable housing expectations are limited (GLA, 2004; Greater London Authority GLA, 2017; GLA, 2018). This creates what the planning Inspector for the OPDC Local Plan eloquently identified as a “nexus between density/intensity, height and housing targets”<sup>25</sup> in which taller buildings and less affordable housing can yield more revenue streams for the state. The stage is set for the production of a new typology of high-rise and high-density development in Old Oak – with both developer and OPDC-led plans reflecting a scale of development not yet seen in London (OPDC, 2019).

One of the few opportunities for raising loans for development based on the uplift in business rates levied on new enterprises which flow from a development has been closed down as these are being earmarked as the primary basis for local government’s core funding (GLA Officer 1; Department for Communities and Local Government, 2013). Faced with the conundrum that child and adult social care must be paid for from this money, as local borough members of the board regularly point out, the OPDC has stalled in its search for reliable financial sources to open up the core development site. The Mayor’s own assessment of the impacts of the financial challenges facing the OPDC when he came into office in late 2016 stands:

2.3 In addition to impacting on the ability of developments to provide an acceptable level of affordable housing, the high cost of infrastructure may force a quantum and scale of development that is unacceptable in height, scale, density or mass – and at the expense of community infrastructure. (Mayor of London, 2016).

This is evident in the outcomes of negotiations between developers and planners in relation to planning applications submitted to the OPDC. By late 2017, development proposals had yielded little in the way of the most affordable rentals (social rent, or London Affordable Rent) rent (5%) and overall affordable housing also including products directed at middle-income households and aspirant homeowners (22 %), way below the Mayoral target of 50 % affordable housing, of which 30 % should be at the most affordable rents. Although by mid-2020 in the OPDC’s own determinations (OPDC Planning Committee, Tuesday 14 July, 2020) they very neatly met the lower overall target of 35 % “affordable” housing by relying mostly (78 %) on shared ownership units, affordable only to highly paid professional workers or a new

<sup>23</sup> The 1990 Town and Country Planning Act provides for negotiating obligatory contributions - hence ‘planning obligations’ – specifying the necessary conditions to make the proposed development acceptable in planning terms.” (Ministry of Housing, Communities & Local Government, 2018, p. 6). CIL “the Community Infrastructure levy (CIL) is a locally determined fixed charge on development which usually takes a relative form, such as ‘£X per square metre of new development’.” (Ministry of Housing, Communities & Local Government, 2018, p. 6). “S106” contributions are planning gain, negotiated on a development by development basis.

<sup>24</sup> “what used to be the London design guide is now the mayor planning supplementary guidance. There are prescriptive requirements for private amenity space per dwelling, the size of the space depends on the size of the dwelling. So, for a 2 bed 4 persons flat it’s 6 square meters; typically, you see that as a balcony, on a tall building.” (Consultant architect 1)

<sup>25</sup> See [https://www.london.gov.uk/sites/default/files/id11\\_opdc\\_hearing\\_a\\_genda\\_session\\_4.pdf](https://www.london.gov.uk/sites/default/files/id11_opdc_hearing_a_genda_session_4.pdf).

capped rental product designed by the Mayor to encourage middle-income households to save for purchasing a property<sup>26</sup>.

In addition to seeking to intensify development to maximise planning gain income, despite vociferous local opposition and even some developer push-back, the OPDC has adopted a range of tactics to try to bring forward development on the site which could maximise the potential income streams (Old Oak Neighbourhood Forum (OONF, 2017; Interview, Developer 2; Architects 2 and 4). In the first place, the simple act of designating the opportunity area sets “planning certainty” for the area and the “market takes over” – but even so, in “the really, really crunchy brownfields sites, like Old Oak, like Barking Riverside ... they need something more” (Interview, GLA Officer 1). The downside of the certainty is that immediately a designation is anticipated with a certain development potential, as in the Johannesburg case, land values rise through speculation and land banking<sup>27</sup>. From the developers’ viewpoint, planners “are trying to control land prices because the lower the land price, the more the profit, the more they can extract” (Property Developer 6). Local planners have to work hard to ensure that future income potential is not dissipated through land sales at inflated prices, rendering developments potentially unviable when policy expectations are placed for infrastructure and housing contributions. The ambition is to ensure that land is priced to include anticipated planning obligations and planning gain (OPDC, 2015b; McAllister, 2019). The OPDC has set a standard format for establishing returns to the landowner of current use value plus a premium for the land owner prior to undertaking “viability assessments” to determine appropriate planning gain (Robinson and Attuyer, 2020; OPDC, 2015b). Some plans to experiment with auctioning development rights on land might have ensured that the planning authority could benefit from early speculative interest in development and prevent such anticipatory forward sales – but this has currently been ruled out as unlikely to yield significant additional funding (Mayor of London, 2018, para 11.1.64). This signifies that the results of negotiations over planning gain within the UK system are probably comparable to the widely recognized practices of value extraction through auctions of development rights in contexts such as Singapore and Ethiopia (Haila, 2015; Goodfellow, 2017). However, the routinised expectation to generate “affordable housing or other public benefits” (Interview, OPDC Officer 2) in this way has to be balanced against the developer’s right to simply walk away from the development, either selling the land on with the agreed planning permission (potentially diverting value capture in the process), or postponing any development at all, as has been the case with the main private developer in the OPDC area.<sup>28</sup> As one of the OPDC officers acknowledged in

general terms “Then that, yeah. That puts you in a tricky position.” (Interview, OPDC Officer 2).

The second lever to influence income streams from development is around the phasing of development. Here three things matter. Firstly, getting early development off the ground to indicate the area’s potential, and maximising the development on early available sites to generate income to pay for infrastructure to make the wider development possible (Interview OPDC Officer 5). This has led to intensification of development on the accessible edges of the new development, and encouragement of developers to push higher to yield more public benefit. Secondly, aligning the early developments with a long-term plan for the area, so planning gain negotiations early in the phasing can ensure infrastructure is in place for the wider development. The first major development to come forward to the Old Oak Planning Committee, for example, agreed to provide a large road, larger than required for the specific development, with an orientation to the overall scheme needs. Thirdly, though, as the Development Infrastructure Funding Study (OPDC, 2015b) noted, this strategy requires caution as too much early development can hinder value capture, as low value developments blighted by existing uses and by long term construction would be sub-optimal in terms of covering infrastructure costs<sup>29</sup>. As in the Shanghai case, bringing forward too much early, speculative development can dissipate value capture to cover the costs of the development.

In all this, the trade-offs between the different elements of a development which need funding are severe. Thus, there is a direct trade-off between providing affordable housing and the overall yield in terms of planning gain. As no profit is made on the lowest priced social rented accommodation the available funds for transport and social infrastructure are reduced. In addition, there is a trade-off between a standard charge levied on developments which designates in advance what that income stream will pay for (as a community infrastructure levy – CIL) and the more flexible, bespoke “S106” contributions which are determined in the extended negotiations undertaken between planners and developers prior to the submission of a planning application. The OPDC, leaning in favour of the more flexible source of funding, with more leeway to negotiate contributions to affordable housing (reflecting the new Mayor’s political and public commitment to a headline percentage of “affordable” housing delivery) and to support flexibility in delivering large infrastructural costs as opposed to the more modest community infrastructure usually anticipated by the standard developer charge<sup>30</sup>.

It is here, then, that care must be taken not to ascribe sometimes shocking contemporary outcomes in the built environment to broad-brush processes such as “neoliberalisation”, “gentrification”, “financialisation” or “austerity”, or to place the blame on iconic private sector actors, such as the greedy global developer (Colenutt, 2020; Hatherley, 2014), or the absent foreign owner (Fernandez et al., 2016; De Verteuil & Manley, 2017). Rather, a complex mix of strongly path-dependent practices involving the territorialization and co-ordination of numerous actors and political and financial interests to enable development, on a case by case basis, lies at the base of the politics of financing urban development. And this accounts for the apparent paradox of councils seemingly attacking their own residents, displacing

<sup>26</sup> Grand Union Alliance Consultation Response to OPDC Draft Local Plan, September 2017 p. 28 (prepared by Sharon Hayward, London Tenants’ Federation; [https://docs.wixstatic.com/ugd/4e0a01\\_7c106380b1e7466fac71c81cc968c3d.pdf](https://docs.wixstatic.com/ugd/4e0a01_7c106380b1e7466fac71c81cc968c3d.pdf)). The definitions of “affordable” housing are highly contested – discounted (50% - 80%) market rental rates and intermediate products (shared ownership) are the most prominent types delivered, largely unaffordable to the average household. Former “social rent” levels in council provided housing have generally been replaced by “affordable rent” set through target rents related to local average incomes. See GLA, 2017 (p. 505) for a summary definition, and London Tenants’ Federation <http://www.londontenants.org> for wider critical debate.

<sup>27</sup> . The problem for the public sector is the minute we make an announcement like we are going to build Bakerloo line extension, speculation happens and then we’ve lost it. Tony, from Berkeley homes is already buying great chunks of XXX road. And all we are doing is consulting for a route for the tube line. 40 years to build the thing. (Interview, GLA Officer 1)

<sup>28</sup> Such a standoff has in fact emerged in the largest development site in the Old Oak area, where the infrastructure, phasing and targets brought forward by the OPDC, alongside the planning gain demands, and then the revelation regarding the planned CPO of 25% of their land, led the landowner to conclude this development is not worth undertaking (Brent and Kilburn Times, 13 February 2019; Robinson & Attuyer, 2020).

<sup>29</sup> We are very deliberately leaving the challenging sites to later because you need the market to change to fund things to do with them (Interview, OPDC Officer 1). The developers also make this point (Interview, Developer 2).

<sup>30</sup> “In light of OPDC’s anticipation that there may be significant s106 costs, particularly in the early years of its CIL charging schedule, OPDC has asked us to test lower levels of CIL, tabulated in 2.21. To allow for this and following such testing and discussion with OPDC, it has been established that a residential CIL rate of £175psm would allow for a significant ‘remaining surplus’ which could be utilised for alternative s106 obligations, assisting OPDC in delivery of its Plan, particularly in the early years of the CIL Charging Schedule’s adoption.” (Deloitte Real Estate, Old Oak and Park Royal Preliminary Draft Charging Schedule Community Infrastructure Levy Viability Report Addendum Report, Item 11, Appendix C, OPDC Board Meeting, 21 September 2016, p. 11).

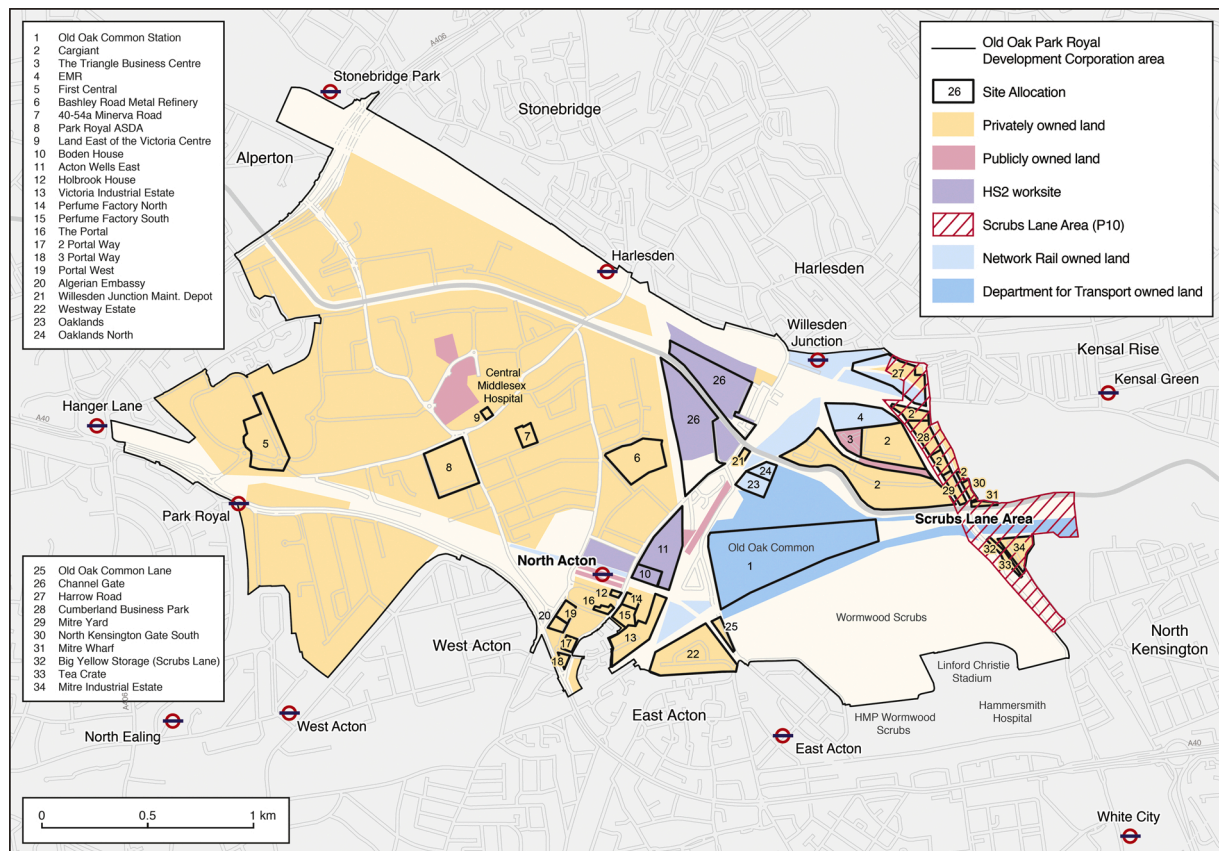


Fig. 16. Map Showing major site ownership, OPDC (Source: OPDC, 2018, p. 245).

social housing for new mixed developments (Lees, 2014; Chakraborty, 2017). Thus, both the cause and the potential for transformation might lie somewhere else than many academic and popular discourses propose. *Most notably, and inspired by the findings of the Shanghai case study in our project, we highlight the interests of state actors in urban development. In the London case, we have identified a deep dependence of state actors on enhancing the extraction of land value by intensifying development, shaping the phasing, and navigating alternative forms of planning gain – to realise political and policy goals, but at times, simply to enable the development to proceed (Robinson & Attuyer, 2020).*

In order to fully understand the financial basis for this business model, though, we need to press further to the financing of each individual development in the wider project, which speaks to the potential for planning gain yield and land value capture to cover the costs of transport infrastructure, social and community infrastructure, and housing.

#### 4.4. Where do the finances come from?

A complex ecosystem of diverse financial actors, sources of finance, and instruments for enabling development work together to actualise development in Old Oak, and in London generally. Within the envelope of the “viability” tests (Colenutt et al., 2015; Turner, 2017) which reveal the profitability of development according to design, anticipated activities, sales and rental values and costs of planned inputs (an ABC of property development – Interview, Planning Committee 1; cf. Christophers, 2014), plans are realised through lengthy engagement between planners and developers. Elsewhere we discuss how the state seeks to orchestrate the planning process to yield benefit pushing buildings higher and lowering commitments to public space and social rent levels of “affordable” housing in favour of maximising the more politically legible overall numbers of housing units (Robinson & Attuyer, 2020). In

fact, it was the proposed development from the OPDC’s own delivery arm, supported by the government grant, which is actively pressing the envelope of height and density, potentially yielding a new typology of very tall buildings for London (OPDC, 2019).

To address the question as to how finances are mobilized and structured to realise development projects within the Old Oak area it is necessary to follow the numerous developers who have or will bring forward planning applications and in time physical developments on the different parcels of land in the area (see Fig. 16). Drawing on several cases of developments each involving from two hundred to several hundred housing units, and largely on the edges of the development, we can identify an eclectic array of financing sources. The type of development and the nature of the financing both have important implications for the final outcome. However, the interests of the state in maximising planning gain income through negotiations with developers, and core assumptions about calculating the profitability or viability of developments, do push developers towards some common assumptions and outcomes.

Cases vary, so we describe a few here. All developers who have been landowners in the area for some time benefit from a windfall gain as the land has gained dramatically in value with the announcement of the rail developments. In one case a large landowner formed a partnership with one of the largest UK private wealth investors in real estate in London. Substantial investment in a Master Planning process was made using the partners’ own resources. They observed that “Once we get to the next stage, and we are having planning permission, we’ll then sort the finances.” (Property Developer 5, 10 November 2016). In this case the construction phase would most likely rely on bank financing leveraged from existing funds and assets. The format of housing being proposed included standard housing units. These would be initially rental units, and once the development had progressed also provide for homeownership. Also envisaged was student housing and graduate co-housing, a



new format for London. These, as well as the rental units, might have the potential to be sold on to global property investment trusts (Spittles, 2016). In another case, a landowner with a strong rental management firm with extensive housing stock across London envisaged borrowing funds from an insurance company, who would be investing in the build to rent business based on their secure, long term returns from rents. In this case an exceptionally tall tower was being proposed, way higher than most other developers were planning, with the intention to maximise “global” (total) rental income from the property (Property Developer 3). This financial model led to the tallest and most dense development, approved by delegation of planning authority from the OPDC to Ealing council, whose enthusiastic approach to intensification of development in the North Acton area has proved highly controversial with residents (see Figs. 17 and 18).

A series of developments involve Housing Associations (HA's) whose core business is provision of affordable housing, and who inherited substantial land and housing assets through the selling off of state assets since the 1990s (Watt, 2009). These developments have been brought forward with a somewhat different model. Financing rests on leveraging the land assets of HAs and their stable resource flows from rental income to borrow to fund further development. In collaborations with major private sector developers, Housing Associations provide security about the sale and management of the affordable rental housing components of a development. However, the developments we observed are intended to cross-subsidise Housing Association's other activities (low income housing) and thus operate on a strongly market basis, including investing in market units for sale which allow development financing to be quickly recouped. In these cases Housing Associations do not deliver anything differently than standard market products, aside from contributing their extensive housing management capacity to managing the affordable rental properties, or their perhaps stronger interest in acquiring rental units for their own investment portfolio. As “registered” housing providers, approved by the Mayor, some measure of grant funding is available to Housing Associations from central government via the Mayor, which he has been using strategically to raise the level of delivery of affordable housing in the OPDC area - usually slightly discounted market rent or shared ownership products - to formally meet his

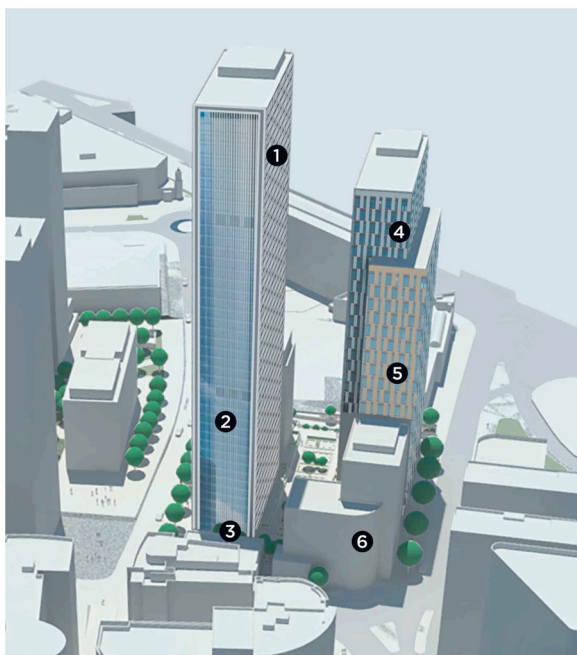


Fig. 17. Tall tower proposed in OPDC area for maximising global rental incomes, North Acton (Source: Public consultation for Ealing planning application, 2016).



Fig. 18. Views of intensifying development in North Acton, 2014-2019 (author photos).

targets. This makes the HAs valuable partners for private sector developers.

A classic product of “financialized” globalization is the property REIT (Real Estate Investment Trust) which is making some inroads into residential rental property development in London, known there as “Build to Rent” (Mayor of London, 2017). However, this model is challenging to bring forward within the dual constraints of high land value and high expectations on the part of local authorities of significant developer contributions as planning gain. BTR operates within tighter short term financial constraints (land value and build costs) – the focus is on sustained long term returns and reliance on a trusted development model approved by the likely investors. The Mayor of London is eager to promote these developments as they provide an important potentially secure and stable form of private rented accommodation in a situation where increasing numbers of London's young residents cannot afford to purchase a property, and where a poorly regulated private rented sector with many small landlords has led to expensive, poor quality and insecure rental accommodation (Wilde, 2019; Mayor of London, 2017). Noticing the shifting structure of tenure from ownership to rental, international actors are exploring the London market and to some extent importing a model prominent in the US (Interview, Property Developer 2).

However, these global investors have very tight specifications for their properties in terms of location, scale, build costs, quality and features (such as shared amenities). The interest in patient, long term returns places less pressure on the developer to bring high value property for sale in an uncertain market, making them more suitable for early

phase developments. But the financial envelope for making the development profitable is constrained and the potential yield on the development for the local planning authority is more limited, making these less attractive for authorities seeking to maximise planning gain income for delivering social infrastructure and wider benefits. This is also affected by the build model – tall buildings are not particularly valued, being costlier to build as they become higher. On a rental model this simply adds cost with no commensurate return – compared to high end sales where properties with a view are valued highly (Interview, Property Developer 3). Similarly, land values make a significant difference to the cost structure of this model. However, developments which yield less planning gain early in the process (and whose model does not attract a significant discount on expected returns as the early construction work takes place) can stimulate the wider development, through populating the site and building its reputation. As one of the lead developers noted in relation to student housing:

You do phase one. The reason why you are doing phase one is students are happy to have beautiful buildings ; if it is inconvenient because there is a building site going on next door, they rent. If you bought it, am I going to be brave to spend half a million of my money; buying something is it really going to happen. So it's a rental model that you start with. They then fill up the restaurants and the bars; they've got more disposable income; they are happy to walk around the site, to the tube station; rather than more established people, they are lazy, in a nice way. (Interview, Property Developer 5)

*So, as in our other two cases, lower value developments (student accommodation, co-living, rental properties) are tolerated, even encouraged, in this phase of the development.*

For one REIT funded developer, close relationships existed with the parent company who relied on the local knowledge and contacts of the developer to identify suitable land and construction firms and to navigate the very complex and lengthy planning negotiations.

The guys that were setting it up, I think they were approached by XXX, the pension fund, looking for, to bring PRS [Private Rental Sector] in the UK because it hadn't been done before. I don't know. I assume they could see the housing crisis coming, the prices going up, the affordability becoming challenging and they could see that the model was changing in the UK housing market, certainly London was changing. I suspect it wasn't coincidence but it seemed to converge; they saw an opportunity at this point. (Interview, Property developer 1).

Selling on the portfolio of rental properties in a development revolves around the future value streams of the rental income. A market for this exists not only through REITs but through other kinds of investors who see the potential of these types of development including, for example, the London Borough of Newham which invested in the Old Oak Co-Living development (see Figs. 19 and 20); or bespoke, intermediate property funds associated with mobilizing individual investors in smaller scale developments in London (*South China Morning Post*, 2 January 2018) – for which there is ostensibly significant demand. While foreign investors are notoriously criticized in London, an LSE study (Scanlon et al., 2017) indicates that total foreign purchased residential property in London is less than 20 % of new build, with at least 70 % of this rented out to Londoners. They assessed that overseas investment played a net positive role in housing provision in London. The growth of Build to Rent could therefore see the expansion of effective foreign realisation of value from London based developments but also support a step change in managed rental provision. Some London-based developers are therefore actively seeking to develop housing according to such models on the expectation they will be acquired by American or Canadian pension funds. In some cases, potential investors are closely involved in vetting the planning application and design work (Interview, Property Developer 2). Thus while there is strong political interest in



Fig. 19. The Collective Old Oak Co-Living development (author's photos).

promoting this Build to Rent (BTR) model, the challenge for the developers is the difficulty of bringing this forward in high land value context, and, for the local authorities, the reduced income streams BTR can generate via planning gain at the moment of construction. This lay behind the difficulties an Old Oak project of this nature had in gaining planning approval - negotiations stalled at the S106 agreement - and led to the initial development site being split in two with proceeds from the sale of part of the land increasing the viability of the project. Further concerns were raised regarding conformity with requirements for public space provision (financial mitigation to improve existing local parks rather than providing play space on site), and lack of contribution to wider social infrastructure. This crystallised in opposition to the project from councillors during the formal planning review process, ostensibly for including studio flats below the space requirements of the Mayor's London Plan. It was noted in committee discussion that it was a "juggling act" to ensure viability (Ealing Town Council, Planning Committee, 21 February 2018).

In the longer term developers will be relying on the classic London model of sale of completed units to individual owners, either local or, in some cases, through international marketing. This model is challenging in requiring bespoke and expensive bank financing for the construction phase – both of the major developers embarking on this model of development in the area plan to draw on their own in-house resources and assets to mobilise funding for the construction phase. Sales are dependent on value, which is strongly mediated by the phasing of the development and the perceived value uplift of land – rentals are a more robust investment while land values are low and construction is ongoing in the area. Conventionally, builders release the units for sale in tranches to sustain higher prices through market demand, making build to rent a much quicker option for delivering on housing targets (GLA Officer 1, 14/02/2017). Additional key issues with rental property include securing robust management structures to maintain the value of the property, often through close supervision of tenants and monitoring of activities (similar in some ways to some of the developments identified in our Johannesburg case). Access to bespoke construction methods or in-house materials provision can also reduce costs, as in the case of one developer who anticipated sourcing materials through their usual contacts from their base in central Europe (Interview, Property Developer 8).

#### 4.5. Assessment: Opportunistic, self-funding development

The financial and governance context for the Old Oak development reflects a complex series of negotiations across highly fragmented forms of local, metropolitan and national government and planning authorities, each with differently configured interests and financial concerns.



Bringing forward development relies strongly on yet another set of actors, private developers, state land interests, consultants and financiers whose specific configurations and concerns influence both the outcomes and the pace of development. Lengthy and confidential negotiations are determinant of built form and value capture (Robinson & Attuyer, 2020). The primary business model, though, involves direct land value capture from developers at the point of delivery with the possibility of limited central state investment. Other forms of enhanced value flows from development can be relevant – delivering housing can expand council tax income (although this is very modest and non-dynamic in the UK context). A useful vehicle for financing development in recent times, borrowing against the projected uplift and expansion of business rates, is now limited as business rates are increasingly ring-fenced as a direct allocation to boroughs. As we saw in the Old Oak case, some central government funding is being sought, and might be forthcoming, on a competitive basis, if certain conditions can be met. Short, then, of actually owning land and keeping all developer gains to the public sector, or receiving a direct government grant (perhaps acknowledging the wider benefits of the development to the exchequer through general taxation income), local planning authorities must administer charges or negotiate for the costs of any development (transport infrastructure, social infrastructure, affordable housing delivery) to be achieved directly from the developer. This leads to often tense relationships amongst developers, states and community groups (Wainright, 2015) and has strong implications for built environment outcomes and urban design (Carmona, 2014). The state interest in the built environment is therefore strongly for intensifying development through setting planning obligations, levying development charges and negotiating planning gain with private developers – if only to bring forward development of some kind to meet wider strategic goals, notably housing delivery.

The spatial structure of governance (as fragmented), and the distinctive form of the regulatory mechanisms available for negotiating planning gain, as well as the territorial fragmentation of spatial planning across the city, means that the extraction of value from urban development is narrowly focused on small areas, which largely need to fund themselves. Opportunities for bringing forward a development and securing the financing for it rely on building a wider constituency across different government entities and working closely with a wide range of private developers. Thus, assembling the agency to define the scope of interest, realise value and mobilize investment in a development, is not straightforward, and necessitates complex transcalar negotiations which are prone to uncertainty and delay.

## 5. Conclusions

The case studies we have presented here have been drawn into comparative reflection across three themes: the strategic place of mega-urban developments in the wider urban development path of each context; the ways in which distinctive modes of territorial regulation and institutional innovation have shaped the form and progress of the developments; and the nature of the business models underpinning the developments, including ways of financing the development. We have identified a number of ways in which these strategic goals, governance imperatives and business models exceed the analytical lenses of neoliberalism and financialization, although we acknowledge these both play a role in each context. Our analysis here has benefited from a starting point which reflects on the specificity of each development in order to generate comparative insights. Particularly, the diverse interests and roles of states have become apparent. In China, it is the state's ambitions which are achieved through market means; in Johannesburg, a long-standing municipal property tax base is drawn on to achieve wider developmental goals; and in London, the state's interest in direct value extraction from the development, at least partly to deliver housing and residual welfare goals, drives built form to new densities and heights.

To develop our insights, we drew on the shared features of large-

scale developments in diverse contexts as a starting point for systematic comparative reflection – all three projects are multi-jurisdictional, take place over a long time-frame, and entail transnational and transcalar governance. Our findings confirm this research design as these shared features were in evidence across the three cases. For example, in relation to the relevance of the long time frames, we saw complex re-negotiations of institutional formations in Shanghai as the circumstances of the development changed over time, notably in the changing role of the urban centre of Lingang in relation to shipping; the declining importance of the project following political change in Johannesburg; and the looming threats to the London project with Brexit and a stand-off in developer-state relations following a period of co-operation. In all three cases the temporal longevity and the spatial scale of the developments presented significant challenges; on the other hand, the lengthy time-frames and diverse qualities of different locations within the sites opened up opportunities for responding flexibly to these challenges. All three initiatives sought to bring forward certain kinds of developments early in the process (such as student housing, or lower value developments) to accommodate increased risk; all three worked with the different features of the sites, shifting focus to different parts of the development area (the edges, already well-connected places, or areas that offered less political resistance or challenges) as the situation changed. All engaged in reimagining the goals of the project: away from the link to the deep-water port in Lingang's case, or focusing on residential as opposed to economic goals as in Johannesburg, or revisiting the expectation that a new commercial centre would be needed in London post the COVID-19 crisis. And all had to consider radically changing the time scale of developments: extending the ambition for the development beyond the initial plan period in London, slowing down investment to avoid speculation in Lingang, and undergoing a hiatus with political changes in Johannesburg. On a methodological level, then, we were satisfied that the basis for comparison across the cases is robust.

In conclusion, we consider how comparative reflection across the three case studies might indicate new grounds for analysis of large-scale urban developments, and urban development politics more generally. Here Shatkin's (2017) research which brings into view the agentful role of the state in shaping urban development based on Asian cases has been important to us. Similarly, as we outline in the introduction, Halbert and Rouanet's (2014) framework which insists on the transcalar territorialisation of urban development politics and regulation (see also Allen & Cochrane, 2007 and Schmid, 2015) is relevant in all three of our cases. The business models which are forged in each large-scale development emerge on specific regulatory and political terrains, but lead to institutional and financial configurations which reflect the unique challenges of the particular development. However, it is also apparent that all three developments also took shape within a shared urban problematic, at least partly funding the development through the value generated by the new development itself – through changing land use, enhanced fiscal returns, and increasing land value.

We highlighted in each of the case study analyses in the sections above some of the comparative insights as they were emerging across the three cases, or drawing from one to inform analysis of the others. Overall, the comparative analysis speaks to wider contributions on the themes of: conceptualizing urban politics (notably the role and interests of the state); the potential to build understandings of urban development politics from diverse, "specific" urban outcomes rather than focusing on the variegation of pre-given circulating or wider processes; and the implications of the different business models (institutional arrangements and financing) emergent in each context for the outcomes of large-scale urban developments. We discuss each of these in turn and offer some insights for policy choices to conclude.

### 5.1. The state in urban development

Recent research highlights the role of local government in organizing



mega urban projects and the importance of institutional continuity and path-dependency in terms of governance and financial arrangement (Bon, 2015; Hwang, 2014). Our cases deepen this observation while emphasizing the significant role of the national state in making urban development projects possible. This was crucial in all three cases in enabling or providing the core infrastructure generating the impetus for the urban development: the deep water port in Lingang, the physical BRT system in Johannesburg, and the high speed rail in London. We do, though, raise a strong critique of assumptions that state goals and practices are necessarily in line with the tenets of neoliberalisation. Thus, while a neoliberal analytical lens would suggest that states mobilise a range of market-oriented policy tools for urban development to promote a “competitive city” profile along the lines of widely circulating economic development models such as the “creative city” or “global city” functions or built environment quality (Lehrer & Laidley, 2009; Peck, 2005), we discern a wide range of state ambitions which shaped not only the nature of the development, but also the design of the business model. In all cases there was a shared state interest in value creation through the development to fund the development, albeit through different mechanisms shaped by the regulatory pathways of each context.

**Shanghai:** Here the project entailed the long term upgrading of the economic functions of the city (shipping and heavy manufacturing) and long term provision of urban housing (a satellite city). This meant taking a long-term view of the financial returns (land leasing and ring-fenced tax income), as well as a metropolitan wide funding strategy. The combined resources of the municipality and of several development corporations could be mobilized to fund the development. A small amount of real estate development outside of the development area helped to stem losses associated with aspects of the project.

**Johannesburg:** Here the project was driven by developmental and transformational ambitions, associated with racially integrating the city after the ending of apartheid, addressing housing shortages and compacting the city. This opened up opportunities for international development financing, and a strong local political lead was able to prioritise funding this project through the internal municipal budget but also drawing on continued central government support for a BRT system.

**London:** an opportunistic project, the development was linked to assumptions regarding population growth and housing shortages and an economic strategy encouraging globally oriented office-based activities. Welfare norms for planning policy were present but stretched by the reliance on direct extraction of value from the development through tightly delimited negotiated planning gain incomes as the major funding source for developments. Some prospects of limited central government funding were present.

We note, then, that there are a diversity of strategic goals and state interests, which are operative both across and within different contexts. Also, across all cases we can expand on Miller and Hobbs' (2005) observation concerning the conflicting roles of states in large and complex projects: “The state is thus in a paradoxical situation in which it is difficult to reconcile its roles as promoter, active participant, regulator, and ultimate approval authority” (p. 47). This was evident in all three cases, as we pointed out in the case study discussions, but is most clearly seen in the Shanghai case, which was a strongly state-led initiative. The observations from that case in which different state entities operated variously as policy maker, regulator, developer, investor, constructor and defender of community interests, opened up insights especially for the London case. There we observed, contrary to writers who emphasize the dominance of developer interests (Minton, 2017; Colenutt, 2020), the strong interests of the state itself in extracting value and intensifying developments to finance the development and meet challenging strategic and political goals of housing delivery. Here, then, different state actors were involved as policy makers and regulators but, with a strong interest in profit-making, at moments in the planning process effectively adopted the perspective of a developer to advance their interests in value extraction. In Johannesburg, a much lighter state

agency – as enabler and agile mobiliser – supported different interests and ambitions to come to the fore, notably securing significant developmental gains from galvanizing developer interest. A wide variety of state interests are apparent in relation to large-scale developments in different contexts: extracting rent directly or to secure political patronage (Shatkin, 2017), advancing national or urban scale prestige (Croese, 2018), funding major transport installations and low-income housing (Goodfellow, 2017), or supporting general national income (Haila, 2015). Any theorization of state interests in urban development therefore needs to acknowledge and work with this diversity of state forms and interests. Methodologically, we have shown how comparative analysis can offer scope to build insights across diversity, by treating urban outcomes as specific.

## 5.2. Theorising urban development from specificity

In each of our case studies the path dependency of the regulatory regime was crucial in explaining outcomes, including the ways in which transnational dynamics are part of that context. The competitive international context of shipping, and the national desire to upgrade manufacturing (Yang, 2015) which were so important to Shanghai; the emergent interest of financialized investors in “buy to rent” property in London; and the international interest in climate change synchronizing with Johannesburg's post-apartheid spatial transformation agenda to yield soft development loans for the Corridors project. Specifically, we noted the following:

**Shanghai:** The history of highly successful metropolitan scale development corporations with scope to take on low return projects, and the ability of the Shanghai municipality to commit to financing Lingang as a new satellite city and industrial area through new taxation receipts were crucial aspects of the development here. This established the potential for a different business model to emerge, one which did not rely on the conventional land business where land value uplift and value realisation, usually through high end residential housing, provides the security of funding for a development. Long term strategic goals could therefore be prioritized.

**Johannesburg:** The energetic post-apartheid activist bureaucracy provided the agile agency needed to initiate a large-scale project with very limited resources, and the long-standing anti-apartheid and planning based interest in integrating and compacting the city provided the secure basis for this distinctive project. The established blended property tax regime (based both on land and beneficiation value) in place at the municipal scale throughout the twentieth century, created the basis for marshalling in-house financing and reassurance that there would be direct returns on the investment.

**London:** Here the relatively un-coordinated governance regime provided the background to the effort required to assemble an emergent transcalar state agency around the project. Two determining features of the project – reliance on planning gain, and the governance of large-scale projects as “spaces of exception” – were features of the wider governance context which had evolved over a long period of time. An important aspect of this development concerned the shared interests of states and developers in extracting value from the development. While informed by policy, as the value to be gained from a development is strongly shaped by its design the generation and division of profit from a development is negotiated in lengthy, confidential, closed door discussions between developers and planners to determine building design and planning gain contributions in advance of submitting a planning application.

In all three cases, the complex relationships between different kinds of delivery vehicles and institutions provided options for innovations in realizing the projects. Identifying innovations in governance had been a key ambition of the overall comparative project, and our study confirms assessments of large-scale development projects as sites of significant institutional and governance innovation and flexibility (Moulaert et al., 2003; Oosterlynck et al., 2010). Choices made in this regard were not to

do with the neoliberalisation of governance – in London there was an interest in the Asian practice of auctioning development rights as a way to enhance value capture from developments. Institutional innovation involved searching for bespoke solutions which would make the development possible in the particular context. This affected potential delivery and outcomes – whether to set up an independent entity (such as the OPDC, or the Lingang group of Development Corporations, with the associated expense and danger of institutional duplication), or to vest close control and financing within pre-existing institutions (the Mayor of London, or the City of Johannesburg), with the attendant risk that political change might lead to the project being sidelined, as occurred in Johannesburg. Re-organising relations amongst different entities, establishing new governmental structures (London, Lingang), or combining complementary capacities of existing units (Johannesburg) were all observed.

Thinking across the three specific regulatory and institutional contexts opened up emergent analytical perspectives, which were not envisaged by the conventional perspectives assuming strongly shared wider processes (as in the selection of EU cases in [Moulaert et al., 2003](#)) or by the focus on circulating practices common in the literature. Building insights across diversity, we found in each case a specific bundling of bespoke institutional, regulatory and financial arrangements constituted a certain “business model”, on the basis of which the development was made possible. Comparing these yielded insights on the ways in which certain kinds of arrangements generated different outcomes.

### 5.3. Comparing “business models” of large-scale urban developments

We have been able to excavate the specific territorialized dynamics of each of the three urban developments we have studied – not that these are separable from globalised or circulating processes. Clearly, processes of territorialisation are as much shaped by transnational actors and dynamics even as these are constituted through their engagement in particular places and practices. Indeed, large-scale urban projects can have significant impacts on wider governance arrangements ([Moulaert et al., 2003](#); [Thornley, 1991](#)), or the operation of the financial sector, for example ([Buckley & Hanieh, 2014](#)). However, the notion of a financialized real estate economy has led to strong analytical emphasis on capital flows rather than assessment of the diversity of financing mechanisms associated with path-dependent territorialized forms of governance which may or may not be confined within the logic of financialization. In each of our three cases of large-scale development we noted the emergence of quite distinctive business models, with reliance on a wide range of sources of finance including general and property taxation (and borrowing against these), direct use of state resources, leverage of private property, capital or wealth, international development financing, planning gain incomes based on direct land value capture, as well as emerging financialized investment vehicles. In each case, the ways in which the development enhanced value was relevant – not only increasing land value, but also expanding the wider (taxable) value of economic activity, the enhanced value possibilities of the urban system as a whole ([Theurillat, 2015](#)), or the wider social and use value of the development. All three cases relied on significant central state support or investment in core transport infrastructure (the deep water port and bridge in Shanghai, national and metropolitan rail systems in London, and a bus transit system in Johannesburg). Each also revealed the need for a creative approach to financing and institutional arrangements, within the path dependent regulatory and fiscal systems.

Shanghai: The business model here rested on direct state investment from the municipality, as well as central state support for the related deep water port and road sea bridge. It also rested on the core development corporations mobilizing their resources for infrastructure provision, and realizing increased land value on a cost recovery basis through land sales and ringfenced general taxation of new enterprises, and to a limited extent through traditional “land business” activities in

areas outside the Lingang area. Additional finances were mobilized from other municipal development corporations which invested surplus from previous successful projects, accepting a small profit margin, as with the few private sector developers permitted to join the venture. Political success – fulfilling the brief from the municipality – rather than profit maximization, framed the logic of investment. Complex organizational configurations were required, including jurisdictional changes to merge the district to Pudong new district, opening up scope to distribute responsibilities for different aspects of the development across different levels of government and various state-owned enterprises.

Johannesburg: Here the internal resources of the municipality, largely derived from property taxes, were consolidated, together with some loan financing (soft international development loans) and bond financing from the international market. Central state investment in the underlying BRT project was crucial. Private investors mobilized their own land and resources, with some borrowing supported by larger local firms. A nascent interest in investment from property REITs was evident, but were more in an early phase of local agents seeking to accumulate a sufficient portfolio to attract the interest of financialized investors. Different departments of the municipality, as well as stand-alone municipal entities were mobilized to pursue the project goals. A small but highly committed team of municipal officials drove the development.

London: Central government investment in transport infrastructure – the high speed railway line – was crucial to opening up this “opportunity”, as was metropolitan scale investment in the crossrail line, based on central state contributions and developer charges from across the city. The immediate development of the OPDC area was primarily reliant on planning gain (land value capture at the point of construction of the development), with some small investment in institutional capacity of the development corporation from metropolitan government, possibly a modest contribution from the central government, and extensive private sector investment. This private investment drew on a variety of sources, from traditional bank financing for construction, own resources including the extensive land and housing assets of local Housing Associations, and some interest from international property REITs and other investors in build to rent developments. Institutionally the development occasioned the first new mayoral development corporation, and opened up scope for more formal collaborations between local boroughs and the Mayor in bringing forward large-scale developments in Opportunity Areas. The formal planning process which accompanied this arguably secured stronger accountability in policy development ([Table 5](#)).

We have demonstrated the diversity of business models which can underpin major urban developments. What is evident, then, is that choices (or regulatory pathways) have consequences – the limited room for manoeuvre in London is a direct result of the idiosyncratic self-financing expected of developments, resulting in a limited revenue base for infrastructure and social benefit from planning gain negotiated on a case by case basis. This placed pressure on the development corporation to push forward and intensify early developments to ensure the returns needed for infrastructure investment for the development as a whole. In Lingang, drawing on state resources and with a political rather than profit motivation meant the development corporations were able to support strategic objectives and focus on securing higher returns in the long term. In Johannesburg the relative certainty of the city-wide taxation system and the generally sound fiscal environment supporting access to credit meant that strategic investments could be made in selected locations from reserves accumulated from across the city, and returns to those investments would in turn be secured for future projects. Public interest goals – low income housing and spatial transformation – could be realised through this municipal financial system. In London the narrow and territorially delimited nature of the land value capture regime meant that goals for delivering social infrastructure and affordable housing were under pressure, as the built environment was squeezed to cover core infrastructure and development costs leading to

**Table 5**  
Three business models of large-scale development.

	Old Oak	Lingang	Johannesburg
Role of Land Value	Maximise high value developments (limit returns to landownership; maximise sales and rental incomes); cross-subsidise affordable housing	Encourage economic activity	Initial attempt to minimize land cost to keep low-income housing provision viable but shifted towards a more market related approach with political change
Financing	Planning gain from immediate territory of development; possibility of some central state contribution	Municipal tax on industries; land leasing; SOE resources; wider land business; bank loans against land and business assets	City-wide property tax; Capital Budget of municipality; municipal bond market; French AFD Loan; some central state transfers
Developers and finances	Private sector (own finance, bank loans, some transnational financialized investors); Housing Association (loans against assets); Development Corporation with CPO; Public sector railway	Different levels of government (loans against land); Lingang and municipal SOEs (assets and loans against assets); small private (bank loans and own assets)	Private sector – small local developers (own assets; bank loans; local property firm financing); some larger developers seeking to scale up and financialize housing as REITs.
Institutions	New Mayoral Development Corporation	Multiple State-owned Municipal and District Development Corporations	Municipal institutions; line-function departments, stand-alone entities and contractors

poor outcomes against some policy objectives.

International actors ranging from sovereign wealth funds to transnational private firms or developmental agencies are turning to the urban built environment to realise both profit and potential public benefit. It is important to be aware of the range of ways in which urbanisation can be secured, governed and financed: the business models of large-scale urban developments are highly diverse. As with our case studies here, the way in which they are organised may be at odds with their own national and metropolitan contexts. Enhancing land value as well as securing other value streams through a development is often the foundation for financing urban development. But the different ways of mobilizing resources and realizing value to enable the development to come forward profoundly shape outcomes – in terms of the physical form of the development, the kind of activities supported, and the relative distribution of benefits to the wider society and different agents of development.

#### Author statement

We confirm that this is the work of all stated authors and we agree to its submission.

#### Funding sources

We acknowledge funding from the ESRC for an Urban Transformations grant ES/N006070/1, “Governing the Future City: A comparative analysis of governance innovations in large scale urban developments in Shanghai, London, Johannesburg.

#### Declaration of Competing Interest

None.

#### Acknowledgements

We would like to thank the many participants in the three developments we studied who agreed to be interviewed and who supported our engagement in the processes underway for their time and commitment. We also thank others who worked on the project with us, from whom we learnt much: Katia Attuyer, Allan Cochrane, Romain Dittgen, Margot Rubin, Zheng Wang. In London we are very grateful for the support from Sharon Hayward of the London Tenants’ Federation, partners in the research project; Robin Brown together with others at Just Space; and members of the Grand Union Alliance and Old Oak Neighbourhood Forum. And in Johannesburg we acknowledge the partnership and engagement of Planact, especially Mike Makwela. In Shanghai, Prof Yuemin Ning of East China Normal University was an intellectually inspiring and most helpful host for project activities whose close knowledge of the Lingang case shaped our research questions and informed our analysis from the beginning. We would also like to thank the three referees of this paper whose generous suggestions and questions were very helpful in finalising the text. We also gratefully acknowledge the support of the South African Research Chairs Initiative of South Africa’s National Research Foundation.

#### References

- Aalbers, M. (2016). *The financialization of housing: A political economy approach*. London: Routledge.
- Aalbers, M. B., van Loon, J., & Fernandez, R. (2017). The financialization of a social housing provider. *International Journal of Urban and Regional Research*, 41(4), 572–587.
- Adama, O. (2018). Urban imaginaries: funding mega infrastructure projects in Lagos, Nigeria. *GeoJournal*, 83, 257–274.
- Allen, J., & Cochrane, A. (2007). Beyond the territorial fix: Regional assemblages, politics and power. *Regional Studies*, 41, 1161–1175.
- Appelbaum, A. (2017). *Contestation, transformation and competing visions: A study of Orange Grove and Norwood*, a report for the South African Research Chair in Spatial Analysis and City Planning. online at [https://issuu.com/sacpwits/docs/7\\_orange\\_grove\\_and\\_norwood](https://issuu.com/sacpwits/docs/7_orange_grove_and_norwood).
- Ballard, R., Dittgen, R., Harrison, P., & Todes, A. (2017). Megaprojects and urban visions: Johannesburg’s corridors of freedom and modderfontein. *Transformation Critical Perspectives on Southern Africa*, 95(1), 111–139.
- Beavon, K. (2004). *Johannesburg: The making and shaping of the city*. Pretoria: UNISA Press.
- Berrisford, S., Cirolia, L., & Palmer, I. (2018). Land-based financing in sub-Saharan cities. *Environment and Urbanization*, 30(1), 35–52.
- Beswick, J., & Penny, J. (2018). Demolishing the present to sell off the future? The emergence of ‘Financialized municipal entrepreneurialism’ in London. *International Journal of Urban and Regional Research*, 42, 612–632.
- Bon, B. (2015). A new megaproject model and a new funding model. Travelling concepts and local adaptations around the Delhi metro. *Habitat International*, 45, 223–230.
- Bond, P. (2000). *Cities of gold, townships of coal: Essays on South Africa’s new urban crisis*. Trenton: African World Press. <http://ccs.ukzn.ac.za/files/Bond%20Johannesburg.pdf>.
- Bond, P. (2012). South African People Power since the mid-1980s: Two steps forward, one back. *Third World Quarterly*, 33(2), 243–264.
- Booth, (1996). *Controlling development: Certainty and discretion in Europe, the USA and Hong Kong*. London: UCL Press.
- Bowie, D. (2010). *Politics, planning and homes in a world city*. London: Routledge.
- Bowie, D. (2015). The London plan review and the future of London. *Planning in London*, 93(April-June), 51–52.
- Brenner, N., Marcuse, P., & Mayer, M. (Eds.). (2012). *Cities for people, not for profit: Critical urban theory and the right to the city*. New York: Routledge.
- Brown, R., Edwards, M., & Lee, R. (2014). Just space: Towards a just, sustainable London. In R. Imrie, & L. Lees (Eds.), *Sustainable London: The future of a global City*. Bristol: Policy Press.
- Brownill, S. (1999). Turning The East End into The West End: The lessons and legacies of The London dockland development corporation. In R. Imrie, & H. Thomas (Eds.), *British Urban policy: An evaluation of the Urban development corporations*. (pp. 43–63). London: Sage.
- Buckley, M., & Hanieh, A. (2014). Diversification by urbanization: Tracing the property-finance nexus in Dubai and the Gulf. *International Journal of Urban and Regional Research*, 38(1), 155–175.



- Budenbender, M., & Aalbers, M. (2019). How subordinate financialization shapes urban development: The rise and fall of Warsaw's *Slu(z)* over *doutewiec* business district. *International Journal of Urban and Regional Research*, 43(4), 666–684.
- Buire, C. (2014). The dream and the ordinary: An ethnographic investigation of suburbanisation in Luanda. *African Studies*, 73(2), 290–312.
- Cain, A. (2017). Alternatives to African commodity-backed urbanization: The case of China in Angola. *Oxford Review of Economic Policy*, 33(3), 478–495.
- Canelas, P. (2018). Challenges and emerging practices in development value capture. In J. Tomaney, & J. Ferm (Eds.), *Planning practice: Critical perspectives from the UK* (pp. 70–84). London: Routledge.
- Carmona, M. (2014). The place-shaping continuum: A theory of urban design process. *Journal of Urban Design*, 19(1), 2–36.
- Chakraborty, A. (2017). *A Labour council attacking its own people? This is regeneration gone bad*. The Guardian, 25 October. Accessed 6 September 2018 at: <https://www.theguardian.com/commentisfree/2017/oct/25/labour-council-regeneration-housing-crisis-is-high-court-judge>.
- Charlton, S. (2017). Inclusions and exclusions in the 'corridors of freedom': Pro-poor housing along Johannesburg's bus rapid transit routes. In ECAS7 7th European Conference on African Studies.
- Christophers, B. (2014). Wild dragons in the city: Urban political economy, affordable housing development and the performative world-making of economic models. *International Journal of Urban and Regional Research*, 38(1), 79–97.
- Christophers, B. (2017). The state and financialization of public land in the United Kingdom. *Antipode*, 49(1), 62–85.
- City of Johannesburg. (2011). *City of Johannesburg Adjustments Budget, 2011/12: Supporting information*.
- City of Johannesburg. (2013). *State of the city address by the executive mayor of the city of Johannesburg, councillor Mpho Parks Tau, Linder Auditorium, University of Witwatersrand (Wits) – Johannesburg, 9 May*. online at <https://joburg.org.za/image/s/pdfs/coj%20state%20of%20the%20city%20address%20soca%202013.pdf>.
- City of Johannesburg. (2015). *2015 budget speech by the member of the mayoral committee for finance in the city of Johannesburg, councillor Geoffrey Makhubo, Sandton Convention Centre, Johannesburg, 26 May*. Online at <https://www.joburg.org.za/Sit eAssets/joburg-za/stories/2015/May/budget%20speech%202015%20final%20%20final%2025.05.15.pdf#search=Budget%20speech>.
- City of Johannesburg. (2016). *Built environment performance plan, 2016/17*. <http://mfma.treasury.gov.za/Documents/02.%20Built%20Environment%20Performance%20Plans/2016-17/Final/JHB%20City%20of%20Johannesburg/JHB%20City%20of%20Johannesburg%20Final%20BEP%202016-17.pdf>.
- City of Johannesburg. (2018). *Medium term budget, 2018/19 to 2020/21*. Online at <https://www.joburg.org.za/documents/Documents/Budget/2018-19%20BUDGET%20BOOK.pdf>.
- Clarke, S. E. (1995). Institutional logics and local economic development: A comparative analysis of eight american cities. *International Journal of Urban and Regional Research*, 19, 513–533.
- Colenutt, R., Cochran, A., & Field, M. (2015). The rise and rise of viability assessment. *Town and Country Planning : the Quarterly Review of the Town and Country Planning Association*, 84(10), 453–458.
- Colenutt, R. (2020). *The Property Lobby: The Hidden Reality Behind the Housing Crisis*. Bristol: Policy Press.
- Croese, S. (2018). Global urban policymaking in Africa: A view from Angola through the redevelopment of the Bay of Luanda. *International Journal of Urban and Regional Research*, 42, 198–209.
- Cox, K. R. (2016). *The politics of urban and regional development and the American exception*. Syracuse, NY: Syracuse University Press.
- Crook, T., Henneberry, J., & Whitehead, C. (2015). *Planning gain: Providing infrastructure and affordable housing*. Oxford: Wiley-Blackwell.
- Datta, A. (2015). New urban utopias of postcolonial India: Entrepreneurial urbanization and the smart city in Gujarat. *Dialogues in Human Geography*, 5(1), 3–22.
- De Verteuil, G., & Manley, D. (2017). Overseas investment into London: Imprint, impact and pied-à-terre urbanism. *Environment & Planning A*, 49(6), 1308–1323.
- Department for Communities and Local Government (UK). (2013). *Business rates retention and the local government finance settlement* Accessed 2 June 2020, <https://www.gov.uk/government/publications/business-rates-retention-and-the-local-government-finance-settlement-a-plain-english-guide>.
- Design Council. (2011). *The bishop review: The future of design in the build environment*. London: The Design Council (incorporating CABE).
- Dixon, M. (2010). Emerging chinese role in shaping St.Petersburg's urban landscape: Interscalar investment strategies in the development of a residential megaproject. *Eurasian Geography and Economics*, 51(6), 803–819.
- Fainstein, S. S. (2001). *The city builders: Property development in New York and London, 1980-2000*. Lawrence: University Press of Kansas.
- Fainstein, S. S. (2008). Mega-projects in New York, London and Amsterdam. *International Journal of Urban and Regional Research*, 32, 768–785.
- Ferguson, J. (2010). The Uses of Neoliberalism. *Antipode*, 41, 166–184.
- Ferm, J., & Jones, E. (2016). Mixed-use 'regeneration' of employment land in the post-industrial city: Challenges and realities in London. *European Planning Studies*, 24(10), 1913–1936.
- Fernandez, R., Hofman, A., & Aalbers, M. (2016). London and New York as a safe deposit box for the transnational wealth elite. *Environment & Planning A*, 48(12), 2443–2461.
- Flyvberg, B. (2014). What you should know about megaprojects and why: An overview. *Project Management Journal*, 45(2), 6–19.
- Flyvberg, B., Bruzelius, N., & Rothengatter, W. (2003). *MegaProjects and risk: An anatomy of ambition*. Cambridge: Cambridge University Press.
- Freund, B. (2010). Is There Such a Thing as a Post-apartheid City? *Urban Forum*, 283–298.
- Goebel, J. (2017). *Municipal bonds for infrastructure development in South Africa, a report for the South African local government association and deutsche gesellschaft für internationale zusammenarbeit*. Online at [www.salga.org.za/dev/miif/Document/Municipal%20Bonds%20for%20Infrastructure%20Development%20in%20South%20Africa.pdf](http://www.salga.org.za/dev/miif/Document/Municipal%20Bonds%20for%20Infrastructure%20Development%20in%20South%20Africa.pdf).
- Goodfellow, T. (2017). Urban Fortunes and Skeleton Cityscapes: Real Estate and Late Urbanization in Kigali and Addis Ababa. *International Journal of Urban and Regional Research*, 41(5), 786–803.
- González, S., Oosterlynck, S., Ribera-Fumaz, R., & Rossi, U. (2018). Locating the global financial crisis: Variegated neoliberalization in four European cities. *Territory Politics Governance*, 6(4), 468–488.
- Greater London Authority. (2018). *London housing strategy*. London: Greater London authority. [Accessed 24 Jul. 2018]. Available at: [https://www.london.gov.uk/sites/default/files/2018\\_lhs\\_london\\_housing\\_strategy.pdf](https://www.london.gov.uk/sites/default/files/2018_lhs_london_housing_strategy.pdf).
- Greater London Authority [GLA]. (2004). *The London plan. Spatial development strategy for London*. London: City Hall (Mayor of London).
- Greater London Authority [GLA]. (2011). *Park royal opportunity area planning framework*. London: City Hall (Mayor of London) Accessed 16 September 2018 at: [https://www.ealing.gov.uk/~reg46-park\\_royal\\_opportunity\\_area\\_planning\\_framework](https://www.ealing.gov.uk/~reg46-park_royal_opportunity_area_planning_framework).
- Greater London Authority [GLA]. (2013). *Old oak. A vision for the future*. London, City Hall: GLA Accessed 16 September 2018 at: [https://www.london.gov.uk/sites/default/files/oapf\\_for\\_web.pdf](https://www.london.gov.uk/sites/default/files/oapf_for_web.pdf).
- Greater London Authority [GLA]. (2015). *Further alterations to the London Plan*. City Hall: GLA Accessed 16 September 2018 <https://www.london.gov.uk/what-we-do/planning/london-plan/past-versions-and-alterations-london-plan/further-alterations-london>.
- Greater London Authority [GLA]. (2017). *The London plan, draft for public consultation*. London: GLA, City Hall Accessed 24 Jul. 2018, at: [https://www.london.gov.uk/sites/default/files/new\\_london\\_plan\\_december\\_2017.pdf](https://www.london.gov.uk/sites/default/files/new_london_plan_december_2017.pdf).
- Gualini, E., & Majoor, S. (2007). Innovative practices in large urban development projects: Conflicting frames in the quest for 'new urbanity'. *Planning Theory & Practice*, 8(3), 297–318.
- Guironnet, A., Attuyer, K., & Halbert, L. (2016). Building cities on financial assets: The financialization of property markets and its implications for city governments in the Paris city-region. *Urban Studies*, 53(7), 1442–1464.
- Guofa. (2006). *Several opinions of the state council on accelerating the revitalization of equipment manufacturing industry*, Guofa 2006 [8]. Beijing: Government document.
- Guthrie, A., & Fan, Y. (2016). Developers' perspectives on transit-oriented development. *Journal of Transport Policy*, 51, 103–114.
- Haila, A. (2008). From Annankatu to Antinkatu: Contracts, Development Rights and Partnerships in Kamppi, Helsinki. *International Journal of Urban and Regional Research*, 32, 804–814.
- Haila, A. (2015). *Urban land rent: Singapore as a property state*. John Wiley & Sons.
- Halbert, L., & Attuyer, K. (2016). Introduction: The financialization of urban production: Conditions, mediations and transformations. *Urban Studies*, 53(7), 1347–1361.
- Halbert, L., & Rouanet, H. (2014). Filtering Risk Away: Global Finance Capital, Transcalar Territorial Networks and the (Un)Making of City-Regions: An Analysis of Business Property Development in Bangalore, India. *Regional Studies*, 48(3), 471–484.
- Halbert, L., Attuyer, K., & Sanfelici, D. (2016). Financial markets, developers and the geographies of housing in Brazil: A supply-side account. *Urban Studies*, 53(7), 1465–1485.
- Harrison, K. (2016). *Transit corridors and the private sector, a report for the South African research chair in spatial analysis and city planning*. online at [http://issuu.com/sacpwit/s/docs/4\\_private\\_sector\\_and\\_the\\_regulatory?e=30630457/51771538](http://issuu.com/sacpwit/s/docs/4_private_sector_and_the_regulatory?e=30630457/51771538).
- Harrison, P., Rubin, M., Appelbaum, A., & Dittgen, R. (2019). Corridors of freedom: Analyzing Johannesburg's ambitious inclusionary transit-oriented development. *Journal of Planning Education and Research*. <https://doi.org/10.1177/0739456X19870312>.
- Hatherley, O. (2014). *London's new typology: The tasteful modernist non-dom investment* Accessed 10 July 2017 <https://www.dezeen.com/2014/08/21/owen-hatherley-london-housing-typology-yuppie-flats-tasteful-modernist-investment/>.
- Hart, G. (2016). Relational comparison revisited: Marxist postcolonial geographies in practice. *Progress in Human Geography*, 39(5), 647–657.
- Healey, P., Purdum, M., & Ennis, F. (1992). Rationales for planning gain. *Policy Studies*, 13(2), 18–30.
- Hsing, Y.-T. (2010). *The great urban transformation*. Oxford: Oxford University Press.
- Hwang, J.-T. (2014). Territorialized urban mega-projects beyond global convergence: The case of Dongdaemun Design Plaza & Park Project. *Seoul. Cities*, 40, 82–89.
- ICLEI. (2015). *AFD signs massive loan agreement with City of Johannesburg, 20 May*. Online at <http://africa.iclei.org/news-events/news-details/article/afd-signs-massive-loan-agreement-with-city-of-johannesburg.html>.
- Imrie, R., & Thomas, H. (1993). The limits of property-led regeneration. *Environment and Planning C, Government & Policy*, 11(1), 87–102.
- Inspector OPDC Local Plan. (2019). *Interim findings on viability of Car giant site allocation*. Last Accessed 2 June 2020 at [https://www.london.gov.uk/sites/default/files/id-33\\_interim\\_findings\\_on\\_viability\\_of\\_cargiant\\_site\\_allocation.pdf](https://www.london.gov.uk/sites/default/files/id-33_interim_findings_on_viability_of_cargiant_site_allocation.pdf).
- Jacobs, J. (2006). 'A geography of big things'. *Cultural Geographies*, 13(1), 1–27.
- Jacobs, J. (2012). Commentary: Comparing Comparative Urbanisms. *Urban Geography*, 33(6), 904–914.
- JDA – Johannesburg Development Agency. (2015). *Pooled financing key to development: Mayor Tau*. online at <http://www.jda.org.za/pooled-financing-key-to-developm ent-mayor-tau/>.
- Jessop, B. (2002). Liberalism, neoliberalism, and urban governance: A state-theoretical perspective. *Antipode*, 34(3), 452–472.
- Jessop, B. (2007). *State power: A strategic-relational approach*. Cambridge: Polity Press.

- Jiang, Y., & Waley, P. (2018). Shenhong: The anatomy of an urban investment and development company in the context of China's state corporatist urbanism. *Journal of Contemporary China*, 27(113), 596–610.
- Just Space. (2014). *Further alterations to the London plan: Just space submission*. Accessed 10 September 2018 at: <https://justspacelondon.files.wordpress.com/2014/04/falp-just-space-submission.pdf>.
- Kaika, M., & Ruggiero, L. (2016). Land Financialization as a "lived" process: The transformation of Milan's Bicocca by Pirelli. *European Urban and Regional Studies*, 23(1), 3–22.
- Kanai, J., & Schindler, S. (2019). Peri-urban promises of connectivity; linking project-led polycentrism to the project scramble. *Environment and Planning A: Economy and Space*, 51(2), 302–322. <https://doi.org/10.1177/0308518X18763370>.
- Kantor, P., & Savitch, H. V. (2005). How to study comparative urban development politics: A research note. *International Journal of Urban and Regional Research*, 29(1), 135–151.
- Kinossian. (2012). 'Urban entrepreneurialism' in the post-socialist city: Government-led urban development projects in Kazan, Russia. *International Planning Studies*, 17(4), 333–352.
- Kollamparambil, U. (2016). *Conditions of life and work along the transit corridors: Quantitative analysis of four Johannesburg nodes, a report for the South African Research Chair in Spatial Analysis and City Planning*. online at [http://issuu.com/sacpwits/docs/9\\_economic\\_analysis?e=30630457/51773186](http://issuu.com/sacpwits/docs/9_economic_analysis?e=30630457/51773186).
- Kruger, L. (2013). *Imagining the edgy city: Writing, performing, and Building Johannesburg*. Oxford: Oxford University Press.
- Lancione, M., & McFarlane, C. (2016). Life at the urban margins: Sanitation infra-making and the potential of experimental comparison. *Environment and Planning A*, 48(12), 2402–2421.
- Lauermann, J. (2018). Municipal statecraft: Revisiting the geographies of the entrepreneurial city. *Progress in Human Geography*, 42(2), 205–224.
- Lees, L. (2014). The urban injustices of new labour's "New urban renewal": The case of the Aylesbury Estate in London. *Antipode*, 46(4), 921–947.
- Le Galès, P. (2016). Neoliberalism and Urban Change: Stretching a Good Idea Too Far? *Territory, Politics, Governance*, 4(2), 154–172.
- Lehrer, U., & Laidley, J. (2009). Old mega-projects newly packaged? Waterfront redevelopment in Toronto. *International Journal of Urban and Regional Research*, 786–803.
- Leitner, H., & Shephard, E. (2016). Provincializing critical urban theory: Extending the ecosystem of possibilities. *International Journal of Urban and Regional Research*, 40(1), 228–235.
- Li, Y., & Wu, F. L. (2012). The transformation of regional governance in China: The rescaling of statehood. *Progress in Planning*, 78, 55–99.
- Lin, G. C. S. (2014). China's landed urbanization: Neoliberalizing politics, land commodification, and municipal finance in the growth of metropolises. *Environment & Planning A*, 46, 1814–1835.
- Lingang Area Management Committee (LAMC). (2015). *Building Shanghai as a global science and technology innovation center: Action plan of Lingang*. Available at <http://www.shanghai.gov.cn>, accessed on 16 July 2018.
- Lipietz, B., Lee, R., & Hayward, S. (2014). Just Space: Building a community-based voice for London planning. *City*, 18(2), 214–225.
- Lipman, A., & Harris, H. (1999). Fortress Johannesburg. *Environment and Planning B, Planning & Design*, 26, 727–740.
- London Finance Commission. (2017). *Devolution: A capital idea the report of the London Finance Commission*. London: City Hall, 10 September 2018 at: [https://www.london.gov.uk/sites/default/files/devolution\\_-\\_a\\_capital\\_idea\\_lfc\\_2017.pdf](https://www.london.gov.uk/sites/default/files/devolution_-_a_capital_idea_lfc_2017.pdf).
- Massey, D. (2007). *World City*. Cambridge: Polity Press.
- Mayor of London. (2016). *OPDC strategic review findings - 31.10.16*. Available at: [https://www.london.gov.uk/sites/default/files/opdc\\_review\\_findings\\_final\\_31.10.16.0.pdf](https://www.london.gov.uk/sites/default/files/opdc_review_findings_final_31.10.16.0.pdf).
- Mayor of London. (2017). *Homes for Londoners: Affordable housing and viability supplementary planning guidance*. London: City Hall.
- Mbembe, A., & Nuttall, S. (2008). Introduction: Afropolis. In Mbembe, & Nuttall (Eds.), *Johannesburg: The elusive metropolis* (pp. 1–36). Durham: Duke UP.
- McAllister, P. (2019). The taxing problems of land value capture, planning obligations and viability tests: some reasonable models? *The Town Planning Review*, 90(4), 429–451.
- McFarlane, C. (2010). 'The Comparative City: Knowledge, Learning, Urbanism'. *International Journal of Urban and Regional Research*, 34(4), 725–742.
- Miller, R., & Hobbs, B. (2005). Governance regimes for large projects. *Project Management Journal*, 36(3), 42–50.
- Miller, P., & Rose, N. (1990). Governing economic life. *Economy and Society*, 19(1), 1–31.
- Ministry of Housing, Communities and Local Government. (2018). *The incidence, value and delivery of planning obligations and community infrastructure levy in England in 2016-17. March 2018*. Ministry of Housing, Communities and Local Government. (Authors: Alex Lord, Richard Dunning, Bertie Dockerill, Gemma Burgess, Adrian Carro, Tony Crook, Craig Watkins, Christine Whitehead).
- Minton, A. (2017). *Big capital: Who's London for?* London: Penguin.
- The globalized city: Economic restructuring and social polarization in European cities. (2003). In Moulaert, F., Rodriguez, A., & Swyngedouw, E. (Eds.), (2003). Oxford: Oxford University Press.
- Murray, M. (2011). *City of extremes: The spatial politics of Johannesburg*. Duke University Press.
- Murray, M. (2017). *The urbanism of exception: The dynamics of global city building in the twenty-first century*. Cambridge: Cambridge University Press.
- Old Oak and Park Royal Development Corporation (OPDC). (2015a). *Opportunity area planning framework*. London: City Hall. <https://www.london.gov.uk/file/3243682015a>.
- Old Oak and Park Royal Development Corporation (OPDC). (2015b). *Development infrastructure funding study*. Accessed 10 September 2018 at: [https://www.london.gov.uk/sites/default/files/final\\_old\\_oak\\_diifs\\_141015\\_new\\_cover.pdf](https://www.london.gov.uk/sites/default/files/final_old_oak_diifs_141015_new_cover.pdf).
- Old Oak Park Royal Development Corporation (OPDC). (2018a). (June). *Old oak north development framework principles*. London: City Hall. Last Accessed 12 October 2019, available at: [https://www.london.gov.uk/sites/default/files/32\\_old\\_oak\\_north\\_development\\_framework\\_principles\\_1.pdf](https://www.london.gov.uk/sites/default/files/32_old_oak_north_development_framework_principles_1.pdf).
- Old Oak Park Royal Development Corporation (OPDC). (2018b). *LOCAL PLAN second revised draft for regulation 19 (2) consultation 14 June 2018*. City Hall, London: OPDC Accessed on 12 September 2018 at: [https://www.london.gov.uk/sites/default/files/opdc\\_local\\_plan\\_2018.pdf](https://www.london.gov.uk/sites/default/files/opdc_local_plan_2018.pdf).
- Old Oak and Park Royal Development Corporation (OPDC). (2019). *Old oak north development framework principles addendum*. Last Accessed 12 October 2019, available at: [https://www.london.gov.uk/sites/default/files/opdc\\_response\\_to\\_matter\\_4\\_appendix\\_-\\_oondfp\\_addendum\\_0.pdf](https://www.london.gov.uk/sites/default/files/opdc_response_to_matter_4_appendix_-_oondfp_addendum_0.pdf).
- Old Oak Neighbourhood Forum (OONF). (2017). *Response to OPDC local plan regulation 19 consultation*. Accessed 16 September 2018 at: <https://oldoakneighbourhoodforum.org/wp-content/uploads/2016/10/OONF-response-to-OPDC-FINAL-1.pdf>.
- Olds, K. (2001). *Globalization and urban change: Capital, culture, and Pacific Rim mega-projects*. Oxford: Oxford University Press.
- Oosterlynck, S., Van den Broeck, J., Albrechts, L., Moulaert, F., & Verhetse, A. (2010). *Strategic spatial projects: Catalysts for change*. London: Routledge.
- Orueta, F. D., & Fainstein, S. S. (2008). The new mega-projects: Genesis and impacts. *International Journal of Urban and Regional Research*, 32(4), 759–767.
- Ovans, A. (2015). What is a business model? *Harvard Business Review*, 23(January). Last accessed 27 April 2020 <https://hbr.org/2015/01/what-is-a-business-model>.
- Parnell, S. (2016). Defining a global urban development agenda. *World Development*, 78, 524–529.
- Parnell, S., & Pieterse, E. (Eds.). (2014). *Africa's Urban Revolution*. London and New York: Zed Books.
- Parnell, S., & Robinson, J. (2006). Development and urban policy: Johannesburg's city development strategy. *Urban Studies*, 43(2), 337–355.
- Peck, J. (2005). Struggling with the creative class. *International Journal of Urban and Regional Research*, 29, 740–770.
- Peck, J. (2015). Cities beyond Compare? *Regional Studies*, 49(1), 183–186.
- Peck, J. (2017). "Transatlantic city, part 1: Conjunctural urbanism". *Urban Studies*, 54(1), 4–30.
- Peck, J., Theodore, N., & Brenner, N. (2009). Neoliberal urbanism: Models, moments, mutations. *SAIS Review*, XXIX(1), 49–66.
- Penny, J. (2017). Between Coercion and Consent: The politics of 'Cooperative Governance' at a time of 'Austerity Localism' in London. *Urban Geography*, 38(9), 1352–1373.
- Pickvance, C. (1986). Comparative urban analysis and assumptions about causality. *International Journal of Urban and Regional Research*, 10(2), 162–184.
- Pierre, J. (2005). Comparative urban governance: Uncovering complex causalities. *Urban Affairs Review*, 40(4), 446–462.
- Pinson, G. (2009). *Gouverner la ville par projet: Urbanisme et gouvernance des villes européennes*. Paris: Presses de la fondation nationale des sciences politiques.
- Planact. (2018). Planact's Social Facilitation Role in the Research Project Governing the Future City: A Comparative Analysis of Governance Innovations in Large Scale Urban Developments in Shanghai, London, and Johannesburg". *Planact and the NRF REsearch Chair in Spatial Analysis and City Planning*. <https://www.wits.ac.za/sacp/featured-projects/planact-social-facilitation/>.
- Raco, M. (2005). A step change or a step back? The Thames gateway and the Re-birth of the urban development corporations. *Local Economy*, 20(2), 141–153.
- Raco, M. (2014a). The Post-politics of sustainability planning: Privatisation and the demise of Democratic government. In J. Wilson, & E. Swyngedouw (Eds.), *The Post-political and its discontents: Spaces of depoliticisation, spectres of radical politics* (pp. 25–47). Edinburgh: Edinburgh University Press.
- Raco, M. (2014b). Delivering flagship projects in an era of regulatory capitalism: State-led privatisation and the London olympics 2012. *International Journal of Urban and Regional Research*, 38(1), 176–197.
- Renne, J. L., & Appleyard, B. (2019). Twenty-five years in the making: TOD as a new name for an enduring concept. *Journal of Planning Education and Research*, 39(4), 402–408.
- Robinson, J. (2006). *Ordinary Cities: Between Modernity and Development*. London: Routledge.
- Robinson, J. (2011). Cities in a world of cities: The comparative gesture. *International Journal of Urban and Regional Research*, 35, 1–23.
- Robinson, J. (2014). Virtual issue and editorial essay on comparative urbanism. *International Journal of Urban and Regional Research*. Available for free download at: <http://www.ijurr.org/view/0/ComparativeUrbanismVI.html#>.
- Robinson, J. (2016). Thinking cities through elsewhere: Comparative tactics for a more global urban studies. *Progress in Human Geography*, 40(1), 3–29.
- Robinson, J. (2018). The politics of the (global) urban: City strategies as repeated instances. In S. Oosterlynck, D. Bassens, L. Beeckmans, B. DeRudder, L. Braeckmans, & B. Segaut (Eds.), *The City as a global political actor* (pp. 100–131). London: Routledge.
- Robinson, J., & Attuyer, K. (2020). Extracting Value, London Style: Revisiting the role of the state in urban development. *International Journal of Urban and Regional Studies*. forthcoming.
- Robinson, J., & Parnell, S. (2010). Travelling theory: Embracing post-neoliberalism through Southern cities. In G. Bridge, & S. Watson (Eds.), *New companion to Urban studies*. Oxford: Blackwell.
- Roy, A. (2011). Conclusion. In A. Roy, & A. Ong (Eds.), *Worlding cities*. Oxford: Wiley-Blackwell.



- Rubin, M., & Appelbaum, A. (2017a). *Spatial transformation through transit-oriented development in Johannesburg: Synthesis report*. Online at [www.wits.ac.za/sacp/spatial-transformation-through-tod-in-jhb/](http://www.wits.ac.za/sacp/spatial-transformation-through-tod-in-jhb/).
- Rubin, M., & Appelbaum, A. (2017b). *The city as a laboratory: Experimentation, observation and theorisation from urban labs*. Online at [www.wits.ac.za/sacp/spatial-transformation-through-tod-in-jhb/](http://www.wits.ac.za/sacp/spatial-transformation-through-tod-in-jhb/).
- Savini, F., & Aalbers, M. (2016). The de-contextualisation of land-use planning through financialisation: Urban redevelopment in Milan. *European Urban and Regional Studies*, 23(4), 876–894.
- Savitch, H., & Kantor, P. (2004). *Cities in the international marketplace: The political economy of urban development in North America and Western Europe*. Princeton: Princeton University Press.
- Scanlon, K., Whitehead, C., Blanc, F., & Moreno-Tabarez, U. (2017). *The role of overseas investors in the London new-build residential market. Final report for Homes for London, GLA*. LSE London.
- Schmid, C. (2015). Specificity and urbanization: A theoretical outlook. In Diener (Ed.), *The inevitable specificity of cities*. Lars Müller Publishers.
- Schmid, C., Karaman, O., Hanakata, N., Kallenberger, P., Kockelkorn, A., Sawyer, L., Streule, M., & Wong, K. P. (2018). Towards New Vocabularies of Urbanization Processes: A comparative approach. *Urban Studies*, 55(1), 19–52.
- Shanghai Academy of Development and Reform (SADR). (2015). *Strategic positioning for deepening the development of Lingang Area*. Shanghai, Internal report.
- Shanghai Urban Planning and Design Research Institute (SUPDRI). (2013). *Evaluation report on the implementation of lingang master plan*. Shanghai, internal report.
- Shatkin, G. (2008). The city and the bottom line: Urban megaprojects and the privatization of planning in Southeast Asia. *Environment & Planning A*, 40(2), 383–401.
- Shatkin, G. (2016). The real estate turn in policy and planning: Land monetization and the political economy of peri-urbanization in Asia. *Cities*, 53, 141–149.
- Shatkin, G. (2017). *Cities for profit: The real estate turn in Asia's urban politics*. Ithaca: Cornell University Press.
- Shen, J., & Wu, F. (2017). The suburb as a space of capital accumulation: the development of new towns in Shanghai, China. *Antipode*, 49(3), 761–780.
- Shen, J., & Wu, F. (2019). Paving the way to growth: Transit-oriented development as a financing instrument for Shanghai's post-suburbanization. *Urban Geography (on-line first)*.
- Shen, J., Luo, X., & Wu, F. (2020). Assembling mega-urban projects through state-guided governance innovation: The development of Lingang in Shanghai. *Regional Studies*. <https://doi.org/10.1080/00343404.2020.1762853>.
- Shin, H. B. (2016). Economic transition and speculative urbanisation in China: Gentrification versus dispossession. *Urban Studies*, 53(3), 471–489.
- Simone, A. (2006). Pirate towns: Reworking social and symbolic infrastructures in Johannesburg and Douala. *Urban Studies*, 43(2), 357–370.
- South African Cities Network. (2016). *State of South African cities report*. Online at <http://www.sacities.net/wp-content/uploads/2016/SOCR/SoCR16%20Main%20Report%20online.pdf>.
- South African National Treasury. (2016). *Budget review*. Online at <http://www.treasury.gov.za/documents/national%20budget/2016/review/chapter%206.pdf>.
- South African National Treasury. (2017). *Budget review*. Online at <http://www.treasury.gov.za/documents/national%20budget/2017/review/>.
- Spittles, D. (2016). *Generation Rent: More than 30,000 new build-to-rent homes are launching across London as the capital cements itself as a city of renters*, 28 September Accessed 30 June 2017 <http://www.homesandproperty.co.uk/propertynews/buying/newhomes/generationrentmorethan30000newbuildto-rent-homesarelaunchingacrosslondon>.
- Swyngedouw, E. (2005). Governance innovation and the citizen: The Janus face of governance-beyond-the-State. *Urban Studies*, 42(11), 1991–2006.
- Swyngedouw, E., Moulaert, F., & Rodriguez, A. (2002). Neoliberal urbanization in Europe: Large-scale urban development projects and the new urban policy. *Antipode*, 542–577.
- Tan, Y. (2018). *How to develop the strategic space for future Shanghai?*. Available at <https://www.jfdaily.com/>, accessed on 16 July 2018.
- Theurillat, T. (2015). *The creation of urban value in China: The case of the modernization of Qujing City in Yunnan. Working paper 1*, MAPS, university of neuchâtel Accessed 3 June 2020 at [http://www.unine.ch/files/live/sites/maps/files/shared/document/s/wp/WP-1\\_2015\\_Theurillat.pdf](http://www.unine.ch/files/live/sites/maps/files/shared/document/s/wp/WP-1_2015_Theurillat.pdf).
- Thornley, A. (1991). *Urban planning under Thatcherism: The challenge of the market*. London: Routledge, Chapman and Hall.
- Todes, A., & Robinson, J. (2019). Re-directing developers: New models of rental housing development to re-shape the post-apartheid city? *Economic and Space*. <https://doi.org/10.1177/0308518X19871069>.
- Tomlinson, R., Beauregard, R., Bremner, L., & Mangcu, X. (Eds.). (2003). *Emerging Johannesburg: Perspectives on the post-apartheid city*. London and New York: Routledge.
- Town and Country Planning Association. (2018). *Briefing, draft revised national planning policy framework, March 2018* accessed at <https://www.tcpa.org.uk/tcpa-briefing-on-draft-revised-national-planning-policy-framework-nppf>, 27 June 2018.
- Transport for London. (2017). *Land value capture*. London: City Hall.
- Transport for London. (2018). *Business Plan 2019/20 to 2023/24*. Mayor of London Accessed 2 June 2020 at <http://content.tfl.gov.uk/tfl-business-plan-2019-24.pdf>.
- Travers, T. (2004). *The politics of London: Governing an ungovernable city*. Basingstoke: Palgrave Macmillan.
- Turner, G. (2017). *Financial viability in planning. Our City London*. 9 March. Accessed 6 September 2018. <http://www.ourcity.london/financial-viability-in-planning/>.
- Turok, I. (2016). Getting urbanization to work in Africa: The role of the urban land-infrastructure-finance nexus. *Area Development and Policy*, 1(1), 30–47.
- UK Government. (2011). *Localism act* Accessed 25 September 2018 <https://services.parliament.uk/bills/2010-11/localism.html>.
- UK Government. (2018). *National planning policy framework, 2018*.
- Urban Design London. (2015). *A new london housing vernacular* Accessed 16 September 2018 at: London: Urban Design London and Design for Homes <https://www.urbandesignlondon.com/resources/new-london-vernacular-housing/>.
- Van den Broeck, J. (2017). We are analogue in a digital world: An anthropological exploration of ontologies and uncertainties around the proposed Konza Techno City near Nairobi, Kenya. *Critical African Studies*, 9(2), 210–225.
- Van Noorloos, F., & Kloosterboer, M. (2018). Africa's new cities: The contested future of urbanisation. *Urban Studies*, 55(6), 1223–1241.
- Wainwright, O. (2015). *Revealed: How developers exploit flawed planning system to minimise affordable housing*. Guardian Cities Accessed 10 September 2018, <https://www.theguardian.com/cities/2015/jun/25/london-developers-viability-planning-affordable-social-housing-regeneration-oliver-wainwright>.
- Wang, Z., & Wu, F. (2019). *In-situ marginalisation: Social impact of Chinese mega-projects*. Antipode. <https://doi.org/10.1111/anti.12560>.
- Wang, Z. (2020). Beyond displacement – exploring the variegated social impacts of urban redevelopment. *Urban Geography*. <https://doi.org/10.1080/02723638.2020.1734373>.
- Ward, K. (2010). Towards a relational comparative approach to the study of cities. *Progress in Human Geography*, 34, 471–487.
- Watson, V. (2014). African urban fantasies: dreams or nightmares? *Environment and Urbanization*, 26(1), 1–17.
- Watt, P. (2009). Housing stock transfers, regeneration and state-led gentrification in London. *Urban Policy and Research*, 27(3), 229–242.
- Weber, R. (2015). *From boom to bubble: How finance built the new*. Chicago: University of Chicago Press.
- Weinstein, L. (2014). 'One-man handed': Fragmented power and political entrepreneurship in Globalizing Mumbai. *International Journal of Urban and Regional Research*, 38(1), 14–35.
- Wilde, M. (2019). Resisting the rentier city: grassroots housing activism and renter subjectivity in post-crisis London. *Radical Housing Journal*, 1(2), 63–80.
- Wood, A. (2014). Moving policy: Global and local characters circulating bus rapid transit through South African cities. *Urban Geography*, 35(8), 1238–1254.
- Wray, C., & Gotz, G. (2014). *Mobility in the Gauteng City-Region, a report of the Gauteng city-region observatory*. online at [http://gcro.ac.za/media/reports/mobility\\_report\\_july\\_28\\_2014\\_medium\\_res\\_2.pdf](http://gcro.ac.za/media/reports/mobility_report_july_28_2014_medium_res_2.pdf).
- Wright, T. (2018). Mutant city: On partial transformations in three Johannesburg narratives. *Novel*, 51(3), 417–437.
- Wu, F. (2000). The global and local dimensions of place-making: Remaking Shanghai as a world city. *Urban Studies*, 37(8), 1359–1377.
- Wu, F. (2002). China's changing urban governance in the transition towards a more market-oriented economy. *Urban Studies*, 39(7), 1071–1093.
- Wu, F. (2017). State entrepreneurialism in urban China. *Debating the Neoliberal City*, edited by Gilles Pinson and Christelle Morel Journel. Abingdon, Oxon: Routledge. Pp. 153–73.
- Wu, F. (2018). Planning centrality, market instruments: Governing Chinese urban transformation under state entrepreneurialism. *Urban Studies*, 55(7), 1383–1399.
- Wu, F. (2019). Land financialisation and the financing of urban development in China. *Land Use Policy*. <https://doi.org/10.1016/j.landusepol.2019.104412>.
- Wu, F. (2020). The state acts through the market: 'State entrepreneurialism' beyond varieties of urban entrepreneurialism. *Dialogues in Human Geography*, x(x), xx–xx. <https://doi.org/10.1177/2043820620921034>.
- Wu, F., & Phelps, N. (2011). (Post)Suburban development and state entrepreneurialism in Beijing's Outer Suburbs. *Environment and Planning A: Economy and Space*, 43(2), 410–430.
- Xie, L. L., & Huang, Y. M. (1995). *Shanghai development study: The management theory of state owned property*. Shanghai: Shanghai Far East Press (in Chinese).
- Yang, C. (2015). Government policy change and evolution of regional innovation systems in China: Evidence from strategic emerging industries in Shenzhen. *Environment and Planning C, Government & Policy*, 33, 661–682.
- Zhang, T. (2000). Land market forces and government's role in sprawl. *Cities*, 17(2), 123–135.
- Zhang, F., & Wu, F. (2012). 'Fostering indigenous innovation capacities': The development of biotechnology in Shanghai's Zhangjiang High-tech Park. *Urban Geography*, 33(5), 728–755.

**Jennifer Robinson** is Professor of Human Geography at University College London. Her book, *Ordinary Cities* (Routledge, 2006) developed a post-colonial critique of urban studies. Her new book, on Comparative Urbanism, proposes methodological foundations for a more global urban studies. Earlier empirical work focussed on urban history and development in South Africa. In addition to the comparative research reported in this paper a new project explores the transnational circuits shaping African urbanisation.

**Fulong Wu** is Bartlett Professor of Planning at University College London. His research interests include urban development in China and its social and sustainable challenges. He has recently published a book, *Planning for Growth: Urban and Regional Planning in China* (2015, Routledge). He is an Editor of the International Journal of Urban and Regional Research. His new research projects examine financialisation and governance in urban China.

**Jie Shen** is an associate professor in School of Social Development and Public Policy, Fudan University. She received her PhD in city and regional planning at Cardiff University. She worked as a visiting scholar at the Department of Geography, University College



London. Her research focuses on urban and regional development in China, including suburbanization and suburban development, mega urban projects, socio-spatial differentiation etc. She has published papers in *Antipode*, *Urban Studies*, *Environment and Planning A*, *Urban Geography*, *Cities*, and *Journal of Urban Affairs*.

**Philip Harrison** is the South African Research Chair in Spatial Analysis and City Planning funded by the National Research Foundation and hosted by the University of the

Witwatersrand, Johannesburg. He served as a member of the National Planning Commission in the Office of the President, 2010–2015. Previously, Prof. Harrison was Executive Director in Development Planning and Urban Management at the City of Johannesburg for 4 years, 2006–2010. Prior to that, he held a number of academic positions at the Universities of the Witwatersrand and Natal. He has published in the fields of city planning and regional and urban development.